ASSESSING THE DIETARY INTAKE OF CALCIUM IN THE GENERAL POPULATION: AN OBSERVATIONAL STUDY

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ABSTRACT

BACKGROUD*: Calcium is an essential mineral critical for various physiological functions, including bone health, muscle function, nerve transmission, and vascular contraction. Despite its importance, many populations worldwide do not meet the recommended dietary intake levels of calcium, leading to potential health issues such as osteoporosis, increased fracture risk, and other metabolic disorders. Assessing dietary calcium intake is crucial for identifying at-risk groups and developing targeted nutritional interventions. Previous studies have highlighted significant variations in calcium consumption based on age, gender, socioeconomic status, and geographical location. Understanding the variations in calcium intake among different population groups is crucial for public health planning and nutritional intervention. This observational study aims to assess the dietary calcium intake within a diverse and representative sample of the general population.*

OBJECTIVE: *The primary objective of this study is to analyze the average daily consumption of dietary calcium among individuals within the general population. By determining the mean intake levels, the study endeavors to establish a baseline understanding of how well the population meets recommended dietary guidelines for calcium.*

The secondary objectives of the study include identifying the main dietary sources of calcium within the population and assessing differences in calcium consumption across various demographics, such as age groups, gender, and socioeconomic status. Additionally, the study aim to examine the associations between dietary calcium intake and common health conditions, providing insights into how calcium intake may influence overall health. These secondary analyses will help uncover critical trends and disparities, informing targeted public health interventions and nutritional policies.

METHODOLOGY: *The study conducted was an observational study conducted at D.Y. Patil Hospital, Nerul, Navi Mumbai, over a period of six months. A total of 100 participants were selected based on specific Inclusion criteria and Exclusion criteria. The data of participants was collected after the consent of the participants. Data collection was facilitated using a Food Frequency Table [FFT], a dietary assessment tool designed to evaluate the frequency and quantity of food intake. The FFT included a comprehensive list of food items categorized into groups, frequency categories, and quantity measures. Additional questions gathered detailed personal, health, and demographic information. Participants provided their full name, email, contact number, gender, age, height, weight, city/country, qualification, occupation, current medications, food preferences, medical conditions, and symptoms. The data was collected by using a Food Frequency Questionnaire [FFQ] and a participant proforma.*

RESULT: *The demographic analysis of study participants indicates a balanced gender distribution, with males comprising 48% and females 52% of the sample, ensuring representation across genders. The age distribution demonstrates that the majority of participants [47%] fall within the 21-25 years age group, facilitating a comprehensive analysis across different life stages. BMI categories reveal potential areas for health interventions, with 51% of participants having a normal BMI, while occupation-wise, students make up 57% of the sample, potentially influencing lifestyle factors. Additionally, food preference data highlights that 65% prefer non-vegetarian food, impacting nutritional findings. Medical condition and symptom reports provide insight into participants' health status, guiding potential interventions. Calcium intake analysis reveals that participants fall short of the Recommended Dietary Allowance [RDA], with no significant differences observed across age groups, gender, socioeconomic status, or medical conditions, underscoring the need for improved nutritional guidelines to enhance calcium intake across the population.*

CONCLUSION: *In conclusion, the study conducted at DY Patil University in Navi Mumbai provides valuable insights into the daily calcium intake habits of a diverse group of individuals. Despite efforts to include balanced representation across genders and age groups, findings reveal that participants consumed an average of 598.46 mg of calcium per day, falling below recommended levels. This deficiency spans across demographics, indicating a widespread issue that necessitates broad-based interventions. While certain dietary habits were identified, they alone were insufficient to meet calcium requirements, emphasizing the importance of a varied diet. The study underscores the role of socioeconomic status in influencing dietary habits and highlights opportunities for health interventions, particularly addressing prevalent conditions like hypertension and diabetes alongside efforts to improve dietary habits. Overall, the research underscores the importance of promoting better dietary habits and enhancing calcium intake across all segments of society to improve overall health outcomes.*

Keyword: - *Calcium Intake, General population, Dietary habit, Food frequency questionnaire [FFQ], Calcium-rich foods, Public health nutrition, Observational study.*

1. INTRODUCTION

Calcium, a vital nutrient constituting around forty percent of our body's mineral fiber mass, plays a crucial role in maintaining skeletal integrity and facilitating various biological functions such as blood clotting, muscle contraction, nerve transmission to enzyme stimulation, calcium is indispensable for overall well-being. [1]

In spite of its significance, many individuals worldwide, particularly in regions like Africa and Asia, fail to meet their daily calcium requirements [2]. In India, for instance, a large portion of the population consumes less than the recommended daily allowance [RDA] of calcium, with Maharashtra exhibiting particularly low intake percentages [3].

This deficiency in calcium consumption can have severe health implications, including increased risk of osteoporosis, fractures, kidney stones, and various chronic conditions [3]. Even in a country like India, abundant in sunlight and dairy production, the majority of the population lacks adequate vitamin D, partly due to insufficient dietary calcium [2].

The sources and absorption of dietary calcium is crucial [4]. Milk and dairy products remain primary sources, other foods like grains, legumes, and green leafy vegetables also contribute. However, the absorption of calcium varies among different foods; for example, certain plant-based chemicals can inhibit calcium absorption, leading to disparities in bioavailability [5].

The factors influencing calcium absorption extend beyond dietary choices to include physiological and external variables such as age, hormonal changes, gut microbiota, and medication usage. These factors highlight the complexity of assessing and maintaining optimal calcium levels for bone health and overall well-being. [6]

Diagnosing conditions like osteoporosis poses challenges, but techniques like dual-energy X-ray absorptiometry [DXA] offer valuable insights into bone mineral density and fracture risk. Despite these advancements, many individuals remain undiagnosed or untreated, emphasizing the need for improved screening and intervention strategies. [7]

In nutritional studies, food frequency tables serve as valuable tools for assessing dietary patterns over extended periods. By analyzing individuals' eating habits, researchers can gain valuable insights into their nutritional status and identify areas for intervention or education. [8]

This observational study aim to evaluate the dietary intake of calcium among individuals from diverse demographic backgrounds. This study seek to provide a comprehensive overview of calcium intake patterns and identify demographic, socioeconomic, and lifestyle factors that may influence dietary choices.

2. METHODOLOGY

2.1 STUDY DESIGN - The study conducted was an Observational Study.

2.2 STUDY SETTING - The study was conducted in the D.Y. Patil Hospital Nerul, Navi Mumbai.

2.3 STUDY DURATION - The study was for 6 months.The Ethical clearance was obtained from the Institutional Ethical Committee prior to data collection.

2.4 SAMPLE SIZE - 100 participants was included in the study.

2.5 SELECTION CRITERIA

INCLUSION CRITERIA	EXCLUSION CRITERIA
Individuals aged 20 years – 65 years.	Individuals aged below 20 years and above 65 years.
Participants from diverse demographic backgrounds, including various ethnicities, socioeconomic statuses, and geographical locations.	Pregnant women.
Teaching staff and students of DY Patil University, Navi Mumbai.	Lactating mothers.
	Nonteaching staff.

2.6 DEVELOPMENT OF TOOL

Food Frequency Table (FFT) - The Food Frequency Table (FFT) is a dietary assessment tool used to evaluate the frequency and quantity of food intake over a specified period. It helps in understanding dietary patterns and nutritional intake of individuals within the target population.

Purpose:

- To collect data on the frequency of consumption of various food items, which can be used to assess nutrient intake, identify dietary deficiencies or excesses, and correlate dietary patterns with health outcomes.

Components:

- **Food Groups and Items:** The FFT includes a comprehensive list of food items categorized into groups such as cereals, millet, and grains; nuts and oilseeds; milk and milk products; leafy green vegetables; and marine shellfish.
- **Frequency Categories**: The table captures the frequency of consumption with categories such as daily, weekly (once, twice, thrice, four times), monthly (once, twice, thrice, four times), rarely, and never.
- **Quantity:** Participants provide the quantity of each food item consumed.

- **Additional Columns:** The table includes columns for total intake, Recommended Dietary Allowance (RDA), and calcium supplement intake.

ADDITIONAL QUESTIONS

Name: Full legal name of the participant. Helps in identification and record-keeping.

Email-id: Email address of the participant. Used for communication and follow-up.

Contact number: Phone number of the participant. An alternative means of communication.

Gender: Gender identity of the participant. Important for demographic analysis and understanding gender-specific trends.

Age: Age of the participant. Used to categorize data by age groups.

Height: Height of the participant. Useful for health-related data and anthropometric analysis.

Weight: Weight of the participant. Important for health assessments and BMI calculation.

City/Country: Current residence (city and country) of the participant. Helps in geographical analysis of data.

Qualification: Highest educational qualification achieved by the participant. Used to correlate educational background with study findings.

Occupation: Current job or profession of the participant. Important for socioeconomic status analysis.

Medications: Any current medications the participant is taking. Relevant for understanding health conditions and potential influences on study data.

Food preference: Dietary preference of the participant (e.g., vegetarian, non-vegetarian, Jain, other). Useful for nutritional and lifestyle studies.

Medical condition: Presence of specific medical conditions (e.g., Diabetes Mellitus, Hypertension, Thyroid). Helps in analyzing the impact of these conditions on the study variables.

- **Diabetes Mellitus:** If the participant has diabetes.
- **Hypertension:** If the participant has high blood pressure.
- **Thyroid:** If the participant has thyroid issues.
- **Other:** Any other medical conditions not listed.

Symptoms: Any specific symptoms the participant may be experiencing.

- **Teeth problem:** Issues related to dental health.
- **Muscle cramp:** Experiencing muscle cramps.
- **Family history of bone disease:** If there is a known family history of bone-related diseases.
- **Other:** Any other symptoms not listed.

This form is designed to gather comprehensive personal, health, and demographic information from participants to ensure thorough data collection and analysis in the research study.

2.7 METHOD OF DATA COLLECTION

- The study was conducted at D.Y. Patil University, Nerul, Navi Mumbai.
- Participants included teaching staff and students.
- Consent forms and detailed information sheets were provided to all participants, explaining the study's purpose, duration, location, benefits, and other relevant details.
- Data was collected by the investigator using a Food Frequency Questionnaire (FFQ) and a participant proforma.
- All collected data were coded and analyzed using SPSS software.
- The results and outcomes were discussed to reach a conclusion.
- A final report was prepared based on the findings**.**

2.8 METHOD OF DATA COLLECTION RELEVANT TO THE OBJECTIVE

Data collection was conducted at D.Y. Patil University, including both teaching staff and students. Participants received consent forms and detailed information sheets. Data was gathered using a Food Frequency Questionnaire (FFQ) and a participant proforma to track dietary calcium intake. Demographic information such as age, gender, and socioeconomic status was recorded.

2.9 DATA ANALYSIS PLAN AND METHODS

STATISTICAL ANALYSIS - SPSS software tool was used to statistically analyze the data obtained.

GENERAL CONSIDERATIONS

- Data collections were done as per the study specific data requirements.
- Data were shared as xlsx file format (Microsoft Excel Version 2007 or above). Alternate data formats shall be a .csv file. Data received were checked for completeness, errors, and discrepancies. Data analyses were done using windows based statistical program Stata version 13.1 (Stata Corp, USA).
- The data of all Subjects which satisfy the inclusion and exclusion criteria were included for analysis.
- The statistical analysis was reported using summary tables, listings, and charts (TLFs).

DESCRIPTION OF DEMOGRAPHICS

The summary of demographic data was presented:

- Age descriptive statistics
- Gender n (%)
- BMI n (%)
- Occupations n (%)
- City n (%)
- Socio economic status n (%)
- Medical condition n (%)
  - Medication n (%)
- Symptoms n (%)
- In general, for categorical variables, the number and percentage of subjects within each category (with the category for missing data as needed) of the parameter was presented**.**
- For continuous variables, the number of subjects, mean and standard deviation (SD) values were presented.
- Individual subject data was provided in the listings. Unless otherwise noted, tabulations of categorical data were present to those categories appearing in the data.

HANDLING MISSING VALUES

Missing data was treated as missing, and no imputation was done**.**

DESCRIPTION

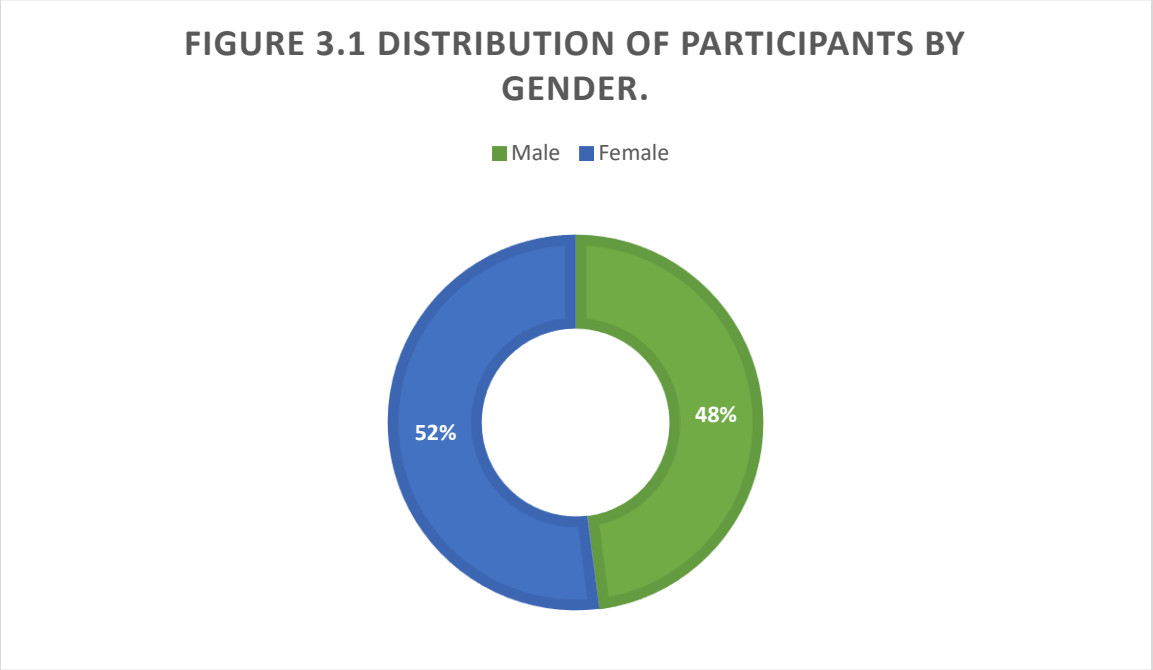
- The method used for Frequency table was descriptive statistics, group t-test & Anova test.
- For the comparison of calcium consumption age wise with RDA, calcium consumption gender-wise with RDA, calcium consumption socio economic status wise with RDA and calcium consumption co-morbidity-wise with

RDA group t-test is used to test whether two categorical variables are related to each other and the comparison between groups were done by analysis of variance (ANOVA).

3. RESULT AND DISCUSSION

Table 3. 1: DISTRIBUTION OF PARTICIPANTS BY GENDER.

Valid	Frequency	Percent	Valid Percent	Cumulative Percent
Male	48	48.0	48.0	48.0
Female	52	52.0	52.0	100.0
Total	100	100.0	100.0	

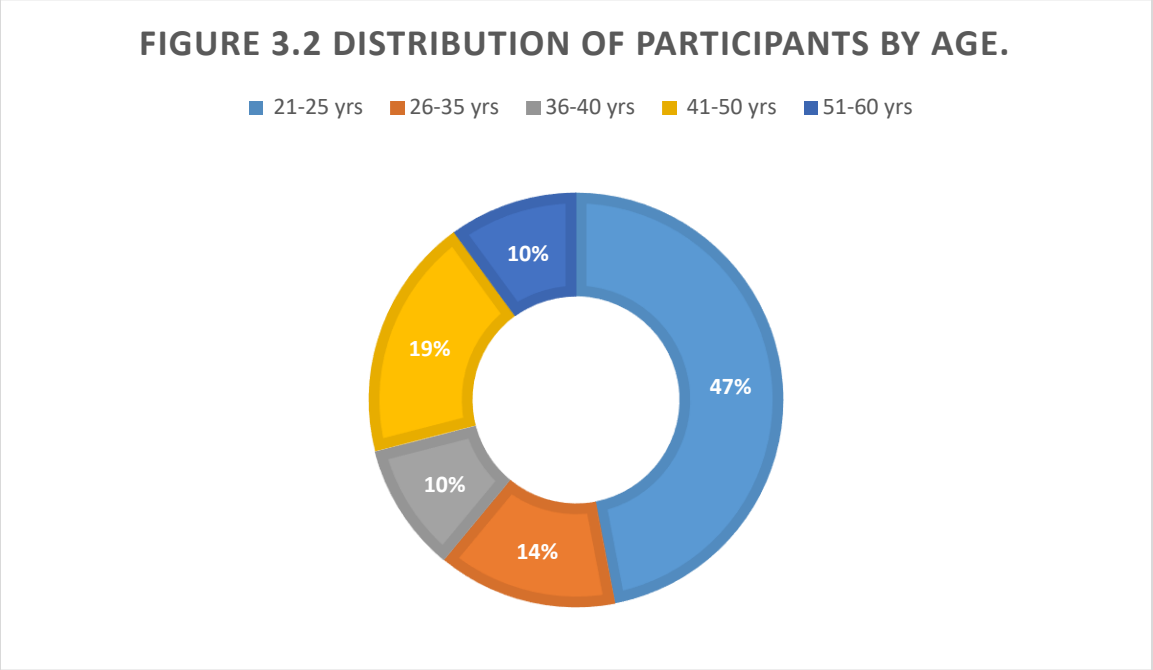


The table presents the gender distribution of participants in the study. Out of 100 participants, 48 identify as male, comprising 48% of the sample, while 52 identify as female, making up 52% of the sample. The percentages provided are both the valid percent and cumulative percent, indicating there was no missing data for gender. The cumulative percent shows that females constitute the remaining 52% of the total, reaching 100% when combined with the males.

Table 3.2: DISTRIBUTION OF PARTICIPANTS BY AGE.

Valid	Frequency	Percent	Valid Percent	Cumulative Percent
21-25 yrs	47	43.0	43.0	43.0
26-35 yrs	14	14.0	14.0	61.0
36-40 yrs	10	10.0	10.0	71.0
41-50 yrs	19	19.0	19.0	90.0

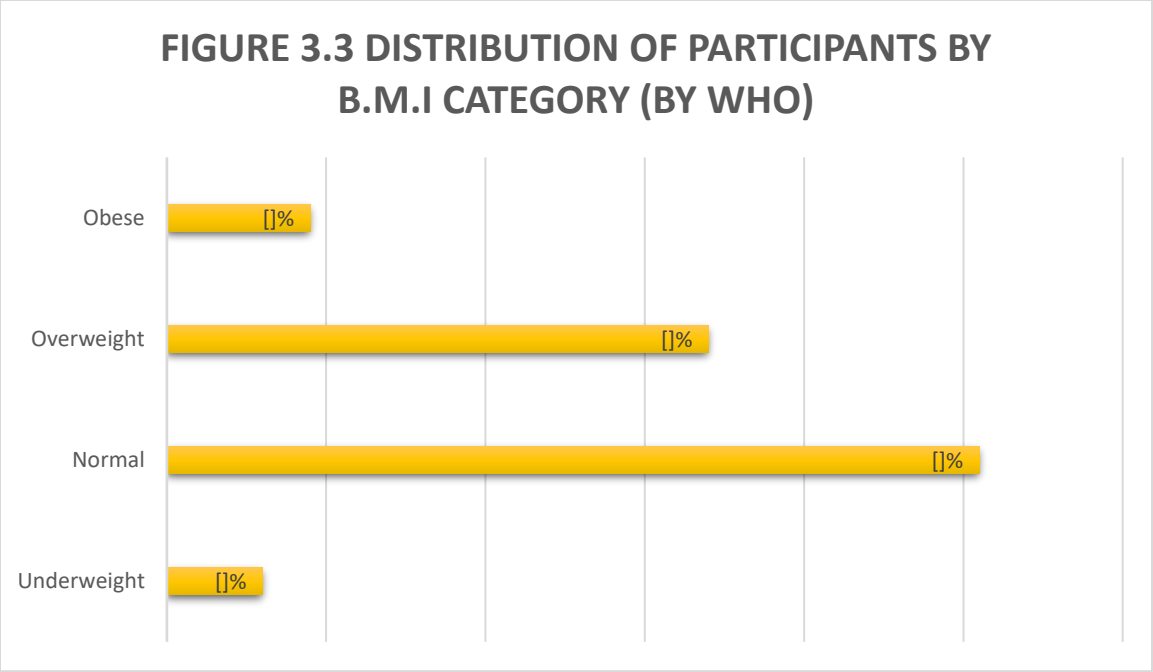
51-60 yrs	10	10.0	10.0	100.0
Total	100	100.0	100.0	



The table provides the age distribution of participants in the study, with a total of 100 respondents. The largest age group is 21-25 years, comprising 47% of the sample. The 26-35 years age group represents 14%, followed by the 36-40 years group at 10%. Participants aged 41-50 years account for 19%, and those aged 51-60 years also make up 10% of the sample. The cumulative percent column shows the progressive accumulation of these groups, reaching 100% with the 51-60 years group.

Table 3. 3: DISTRIBUTION OF PARTICIPANTS BY B.M.I CATEGORY (BY WHO).

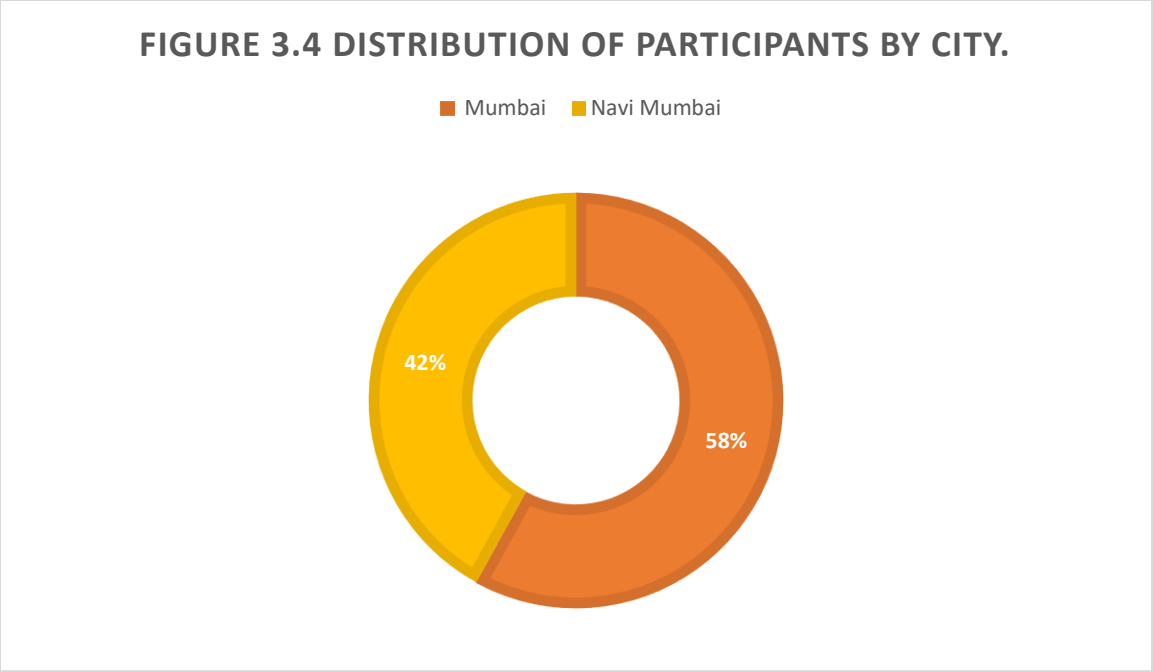
Valid	Frequency	Percent	Valid Percent	Cumulative Percent
Underweight	6	6.0	6.0	6.0
Normal	51	51.0	51.0	53.0
Overweight	34	34.0	34.0	91.0
Obese	9	9.0	9.0	100.0
Total	100	100.0	100.0	



The table displays the Body Mass Index (BMI) categories of participants in the study, with a total of 100 individuals. The majority, 51%, have a normal BMI. Participants classified as overweight constitute 34% of the sample, while 9% are categorized as obese. Those underweight make up the smallest group, at 6%. The valid percent column mirrors the percentage distribution of each BMI category, and the cumulative percent column shows the progressive addition of each category, culminating in 100%.

Table 3. 4: DISTRIBUTION OF PARTICIPANTS BY CITY.

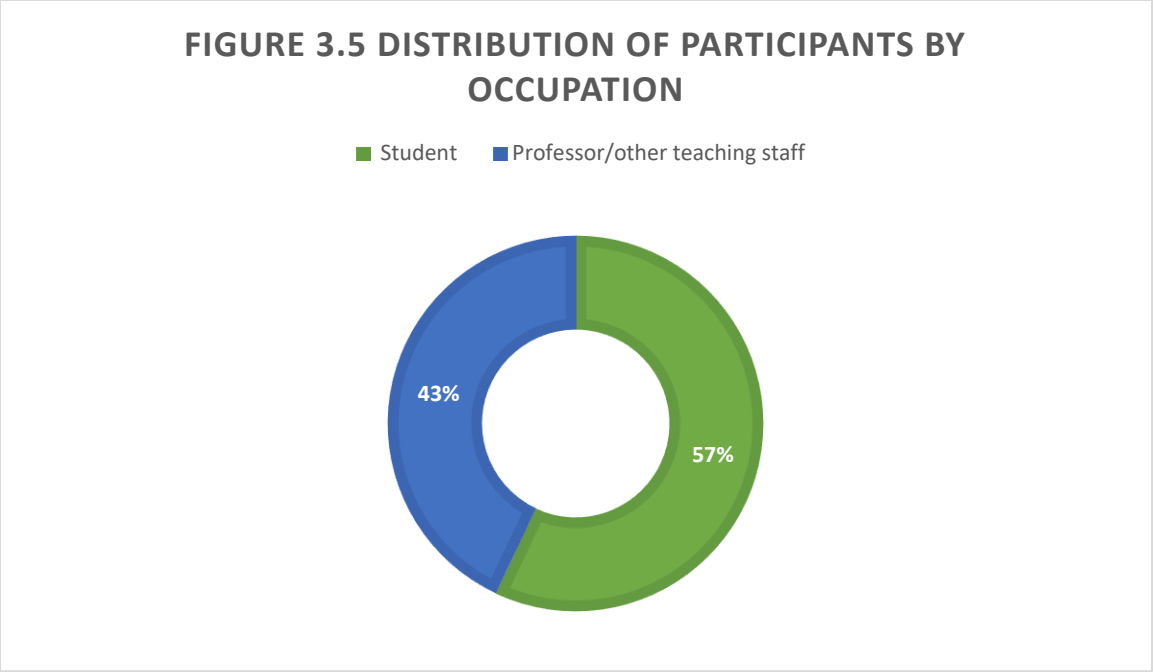
Valid	Frequency	Percent	Valid Percent	Cumulative Percent
Mumbai	58	58.0	58.0	58.0
Navi Mumbai	42	42.0	42.0	100.0
Total	100	100.0	100.0	



The table outlines the city distribution of participants in the study, with all 100 respondents accounted for. A majority of the participants, 58%, are from Mumbai, while the remaining 42% are from Navi Mumbai. The valid percent and cumulative percent columns are identical to the percent column, indicating there are no missing data. The cumulative percent column shows that combining the two cities reaches 100%.

Table 3. 5 : DISTRIBUTION OF PARTICIPANTS BY OCCUPATION.

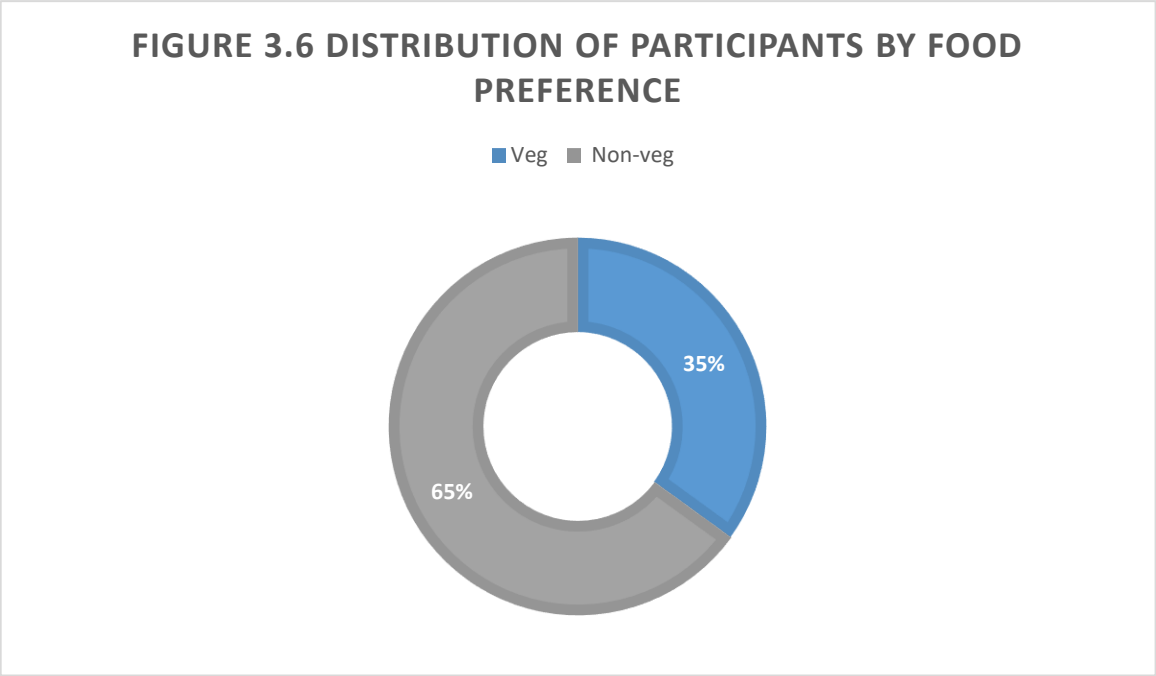
Valid	Frequency	Percent	Valid Percent	Cumulative Percent
Student	57	53.0	53.0	53.0
Professor/other teaching staff	43	43.0	43.0	100.0
Total	100	100.0	100.0	



The table summarizes the occupation distribution of participants in the study, with all 100 individuals represented. A majority, 57%, are students, while the remaining 43% are professors or other teaching staff. The valid percent column confirms these percentages, and the cumulative percent column shows the progressive accumulation of these categories, reaching 100% when combined.

Table 3. 6: DISTRIBUTION OF PARTICIPANTS BY FOOD PREFERENCE.

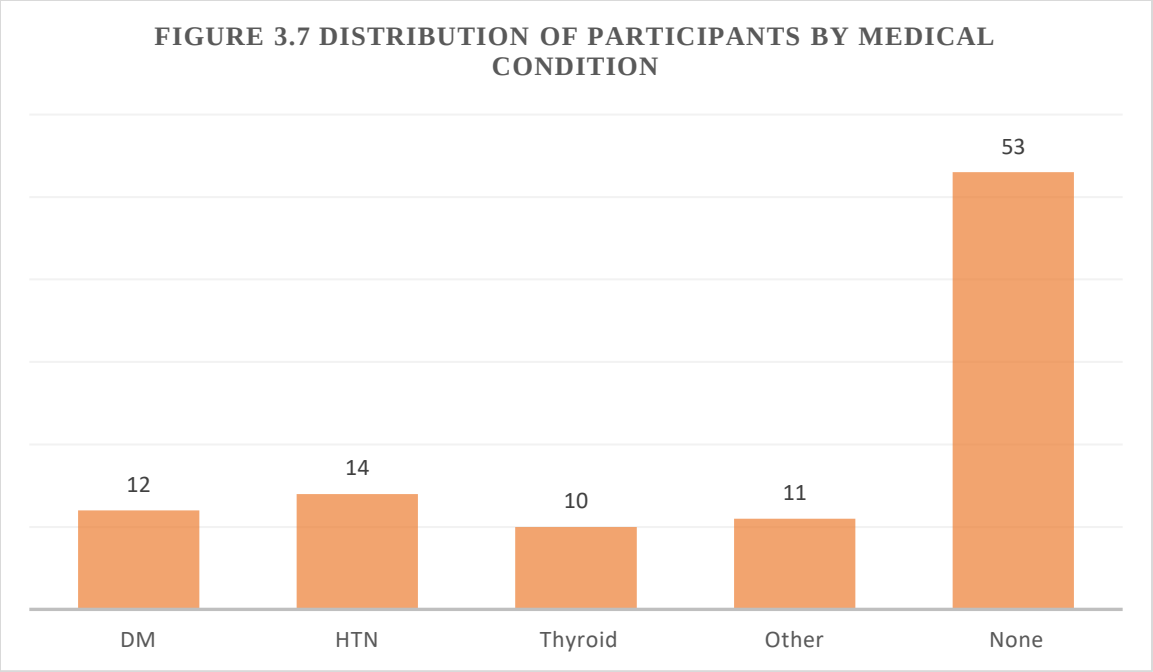
Valid	Frequency	Percent	Valid Percent	Cumulative Percent
Veg	35	35.0	35.0	35.0
Non-veg	65	65.0	65.0	100.0
Total	100	100.0	100.0	



The table displays the food preferences of participants in the study, with all 100 respondents included. A majority, 65%, prefer non-vegetarian food, while 35% prefer vegetarian food. The valid percent column mirrors these percentages, confirming there are no missing data. The cumulative percent column shows the progressive addition of these preferences, reaching 100% when both categories are combined.

Table 3. 7: DISTRIBUTION OF PARTICIPANTS BY MEDICAL CONDITION.

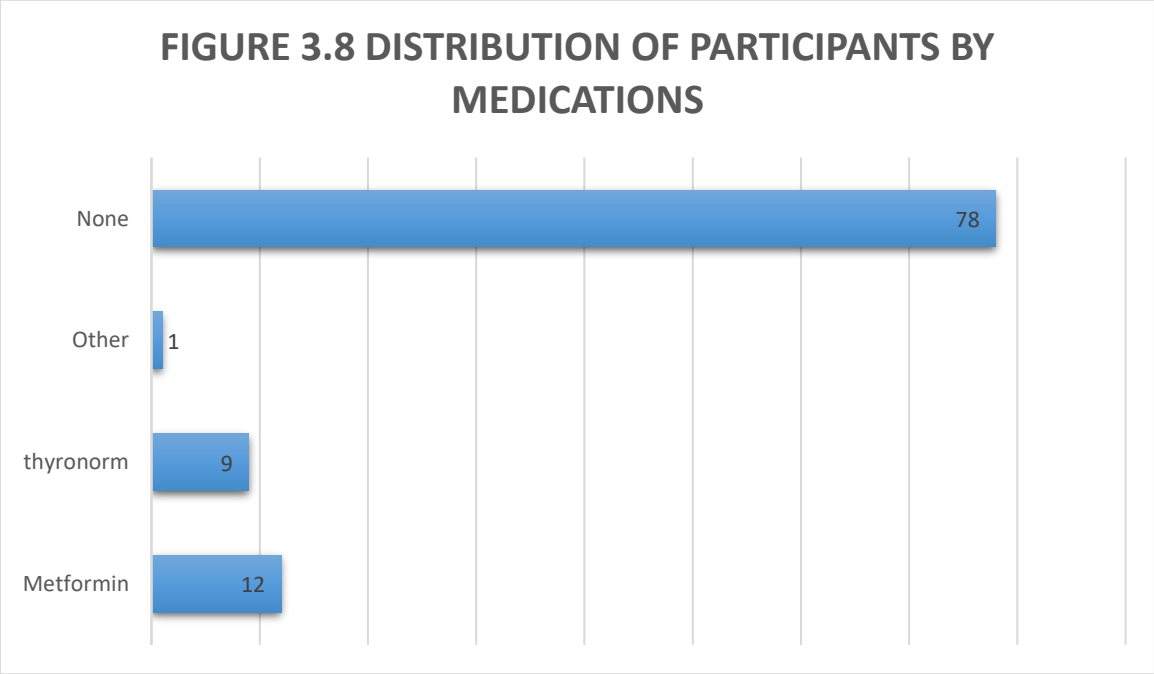
Valid	Frequency	Percent	Valid Percent	Cumulative Percent
DM	12	12.0	12.0	12.0
HTN	14	14.0	14.0	26.0
Thyroid	10	10.0	10.0	36.0
Other	11	11.0	11.0	43.0
None	53	53.0	53.0	100.0
Total	100	100.0	100.0	



The table outlines the medical conditions of participants in the study, with all 100 respondents accounted for. A majority, 53%, reported having no medical conditions. Among those with medical conditions, 12% have diabetes mellitus (DM), 14% have hypertension (HTN), and 10% have thyroid disorders. Additionally, 11% reported other unspecified medical conditions. The valid percent column confirms these percentages, and the cumulative percent column shows the progressive addition of each category, reaching 100% when combined.

Table 3. 8: DISTRIBUTION OF PARTICIPANTS BY MEDICATIONS.

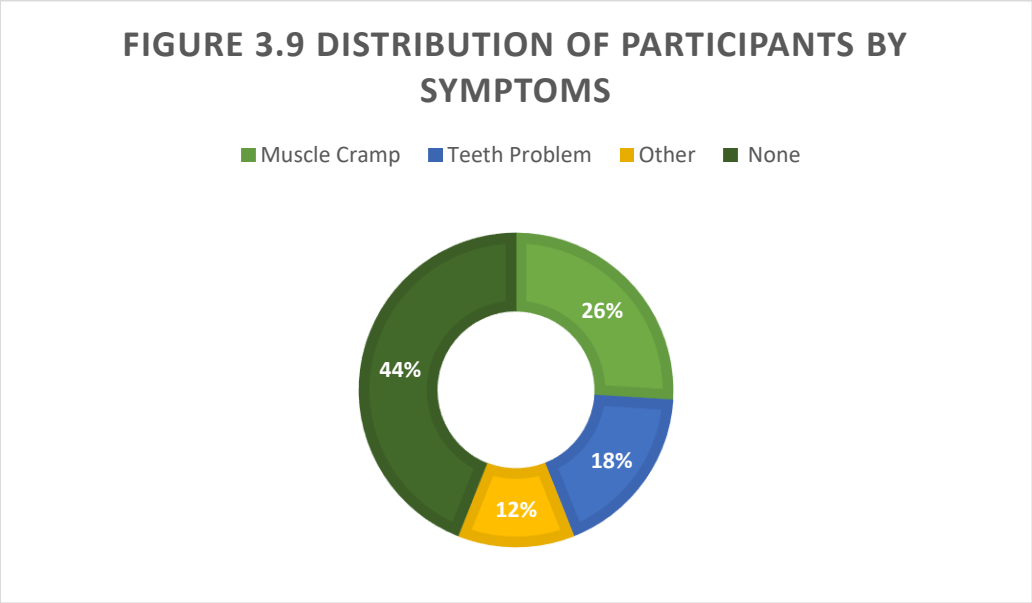
Valid	Frequency	Percent	Valid Percent	Cumulative Percent
Metformin	12	12.0	12.0	12.0
thyronorm	9	9.0	9.0	21.0
Other	1	1.0	1.0	22.0
None	78	78.0	78.0	100.0
Total	100	100.0	100.0	



This table provides the breakdown of medications reported by participants in a survey. Metformin is reported by 12% of respondents, Thyronorm by 9%, and there's one respondent who reported using a medication categorized as "Other". The majority of respondents (78%) reported not using any medication. Overall, the data suggests that the majority of participants do not take medication, with Metformin being the most commonly reported medication among those who do.

Table 3. 9: DISTRIBUTION OF PARTICIPANTS BY SYMPTOMS.

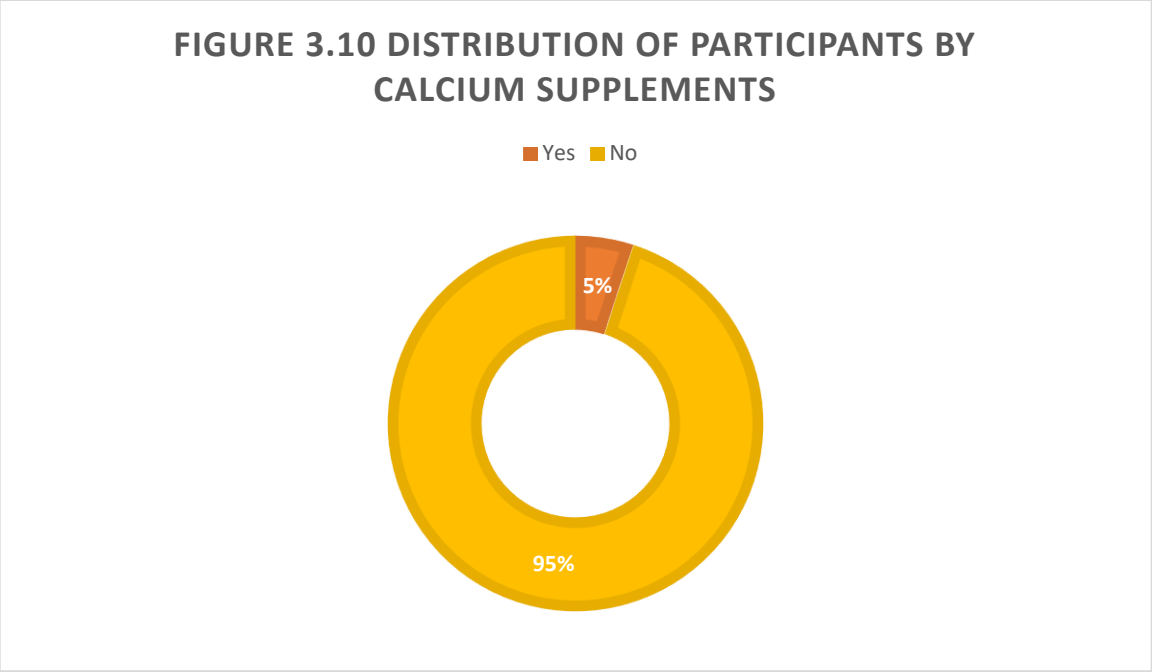
Valid	Frequency	Percent	Valid Percent	Cumulative Percent
Muscle Cramp	26	26.0	26.0	26.0
Teeth Problem	18	18.0	18.0	44.0
Other	12	12.0	12.0	56.0
None	44	44.0	44.0	100.0
Total	100	100.0	100.0	



The table details the symptoms reported by participants in the study, with a total of 100 respondents. A significant portion, 44%, reported no symptoms. Among those experiencing symptoms, 26% reported muscle cramps, 18% had teeth problems, and 12% experienced other unspecified symptoms. The valid percent column matches these percentages, indicating no missing data. The cumulative percent column shows the progressive addition of each category, culminating in 100% when all are combined.

Table 3. 10: DISTRIBUTION OF PARTICIPANTS BY CALCIUM SUPPLEMENTS.

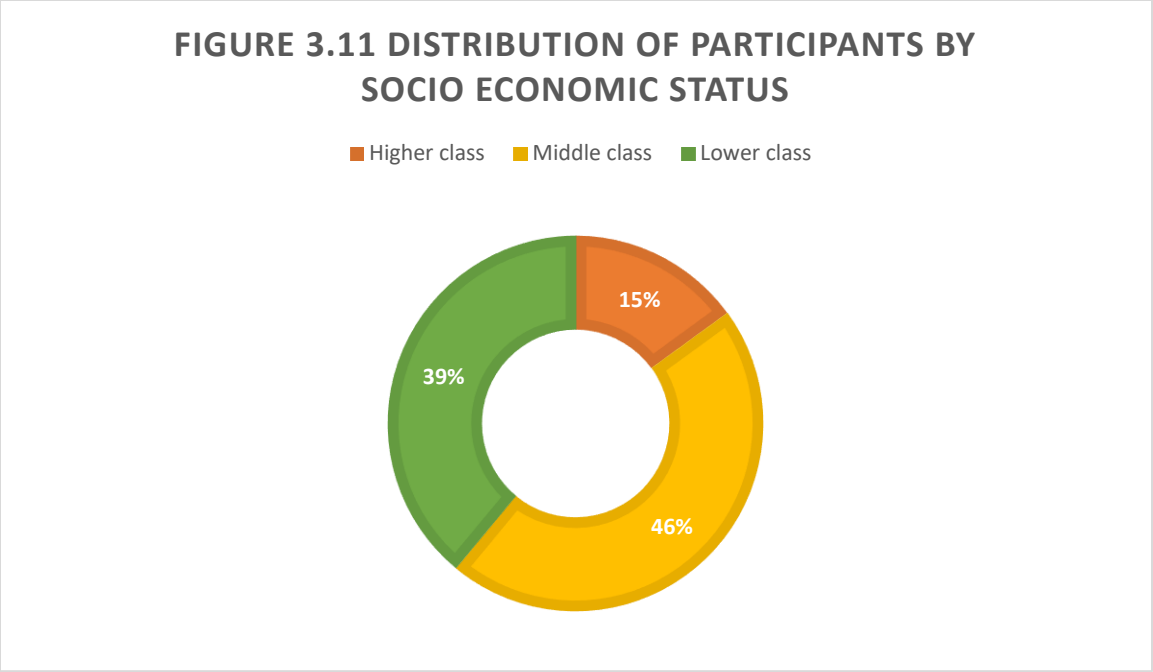
Valid	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	5	5.0	5.0	5.0
NO	95	95.0	95.0	100.0
Total	100	100.0	100.0	



This table presents the responses to whether participants are taking any calcium supplements. The majority of respondents (95%) reported not taking any calcium supplements, while only 5% reported that they do take calcium supplements. This indicates that calcium supplement intake is relatively low among the surveyed population.

Table 3. 11: DISTRIBUTION OF PARTICIPANTS BY SOCIO ECONOMIC STATUS.

Valid	Frequency	Percent	Valid Percent	Cumulative Percent
Higher class	15	15.0	15.0	15.0
Middle class	46	46.0	46.0	61.0
Lower class	39	39.0	39.0	100.0
Total	100	100.0	100.0	

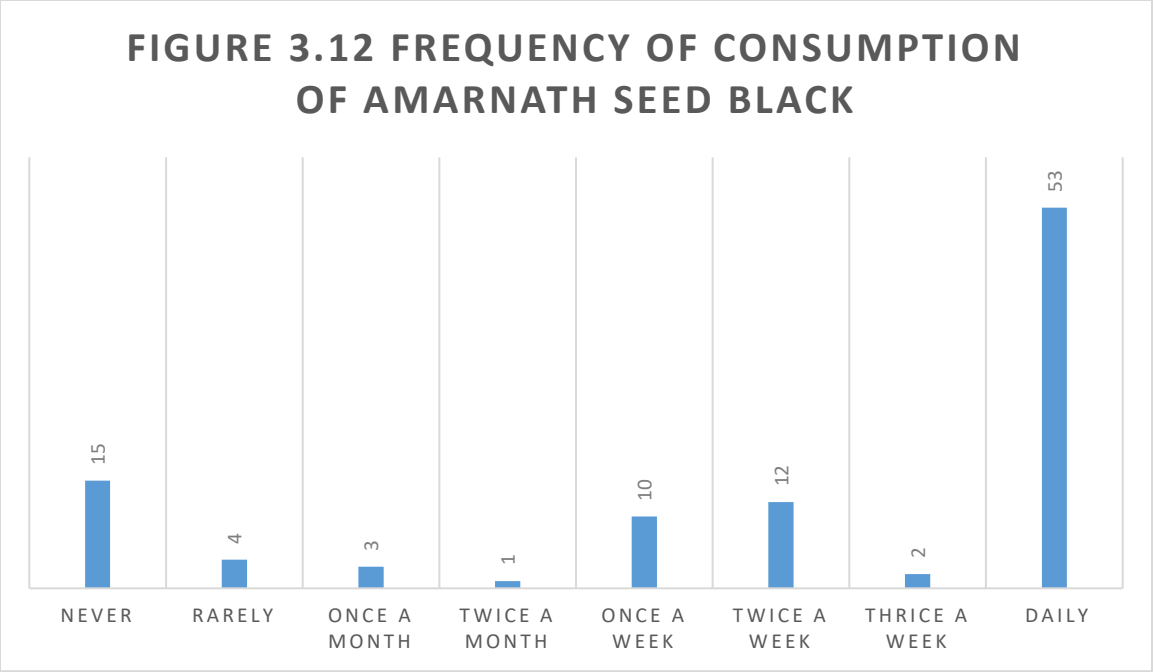


This table categorizes the socioeconomic status of respondents into three classes: higher, middle, and lower. The data shows that 46% of respondents identify as middle class, making it the largest group. This is followed by 39% who identify as lower class, and 15% who identify as higher class. Overall, the majority of the surveyed population falls within the middle and lower socioeconomic classes.

FOOD FREQUENCY QUESTIONAIRE RESULT

TABLE 3.12 Frequency of Consumption of Amarnath Seed Black

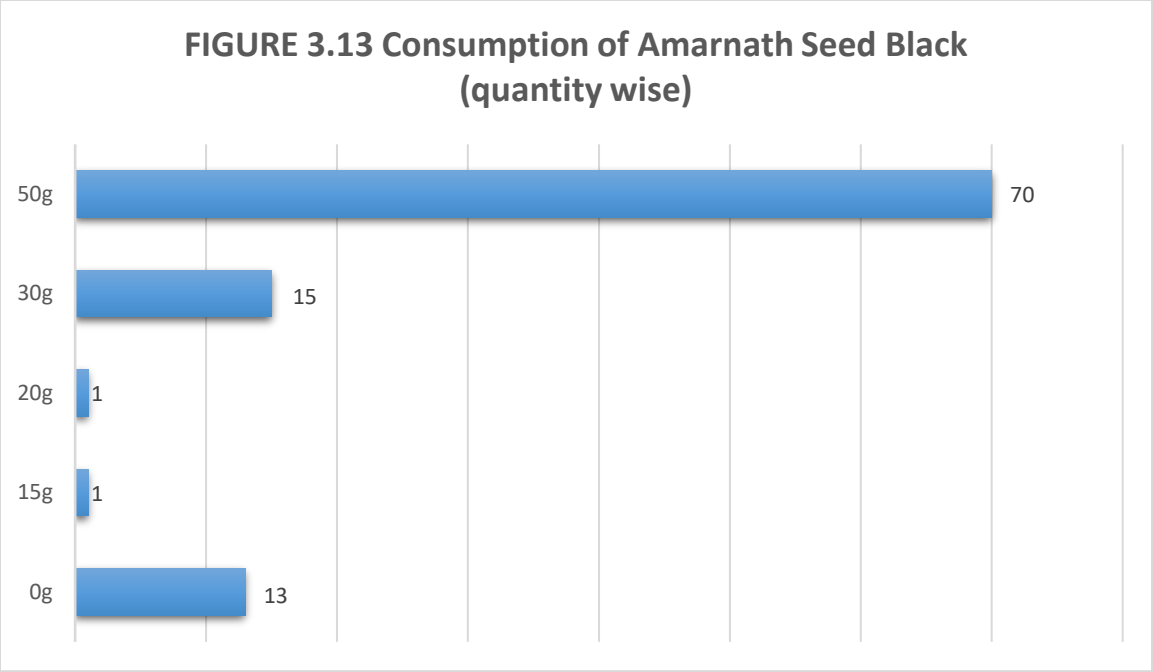
Valid	Frequency	Percent	Valid Percent	Cumulative Percent
Never	15	15.0	15.0	15.0
Rarely	4	4.0	4.0	19.0
Once a month	3	3.0	3.0	22.0
Twice a month	1	1.0	1.0	23.0
Once a week	10	10.0	10.0	33.0
Twice a week	12	12.0	12.0	45.0
Thrice a week	2	2.0	2.0	43.0
Daily	53	53.0	53.0	100.0
Total	100	100.0	100.0	Total



This table presents the frequency of consumption of black amaranth seeds among participants in a dietary survey. The data shows that the majority of respondents (53%) reported consuming black amaranth seeds daily, indicating a high frequency of consumption. Additionally, 12% reported consuming them twice a week, and another 10% reported consuming them once a week. Smaller percentages reported consuming them with less frequency, such as 4% who consumed them rarely, 3% once a month, and 1% twice a month. Only a few respondents reported never consuming black amaranth seeds (15%). Overall, the data suggests that black amaranth seeds are commonly consumed, with a significant portion of the sample consuming them daily.

TABLE 3.13 Consumption of Amarnath Seed Black (quantity wise)

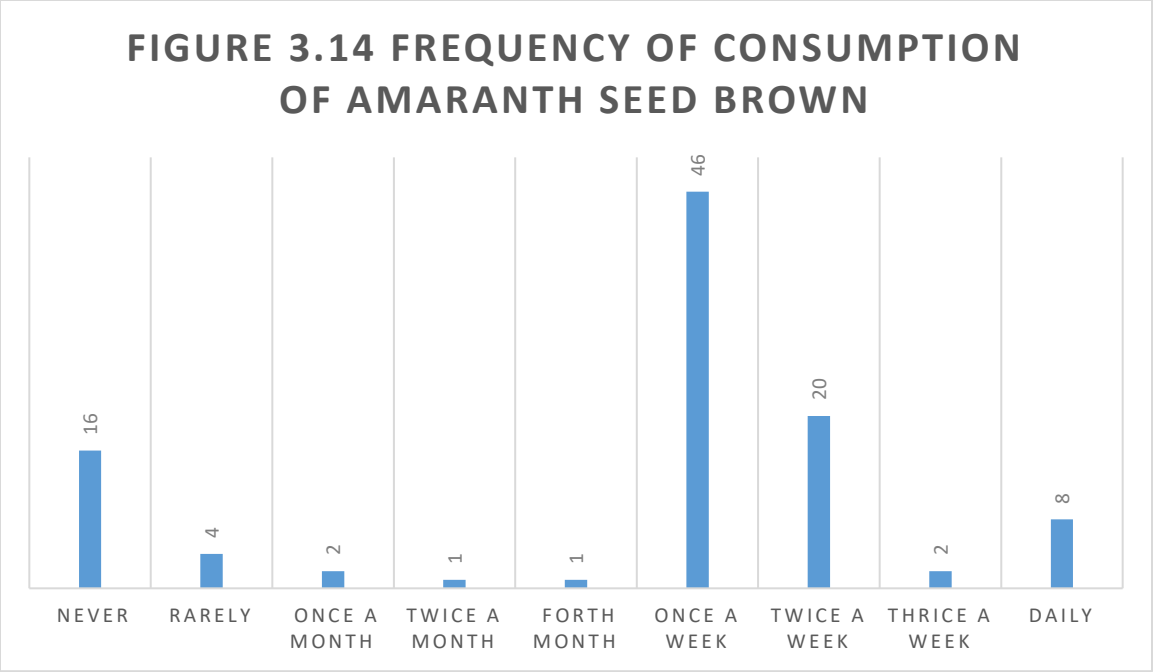
Valid	Frequency	Percent	Valid Percent	Cumulative Percent
0	13	13.0	13.0	13.0
15	1	1.0	1.0	14.0
20	1	1.0	1.0	15.0
30	15	15.0	15.0	30.0
50	70	70.0	70.0	100.0
Total	100	100.0	100.0	



This table presents the quantity of black amaranth seeds consumed, measured in grams, as reported by participants in a dietary survey. The data indicates that 70% of respondents reported consuming 50 grams of black amaranth seeds, while 15% reported consuming 30 grams. Smaller percentages reported consuming different quantities, such as 13% consuming 0 grams, 1% consuming 15 grams or 20 grams. Overall, the data suggests that 50 grams is the most common quantity consumed.

TABLE 3. 14 Frequency of Consumption of Amaranth seed brown

Valid	Frequency	Percent	Valid Percent	Cumulative Percent
Never	16	16.0	16.0	16.0
Rarely	4	4.0	4.0	20.0
Once a month	2	2.0	2.0	22.0
Twice a month	1	1.0	1.0	23.0
Forth month	1	1.0	1.0	24.0
Once a week	46	46.0	46.0	70.0
Twice a week	20	20.0	20.0	90.0
Thrice a week	2	2.0	2.0	92.0
Daily	8	8.0	8.0	100.0
Total	100	100.0	100.0	

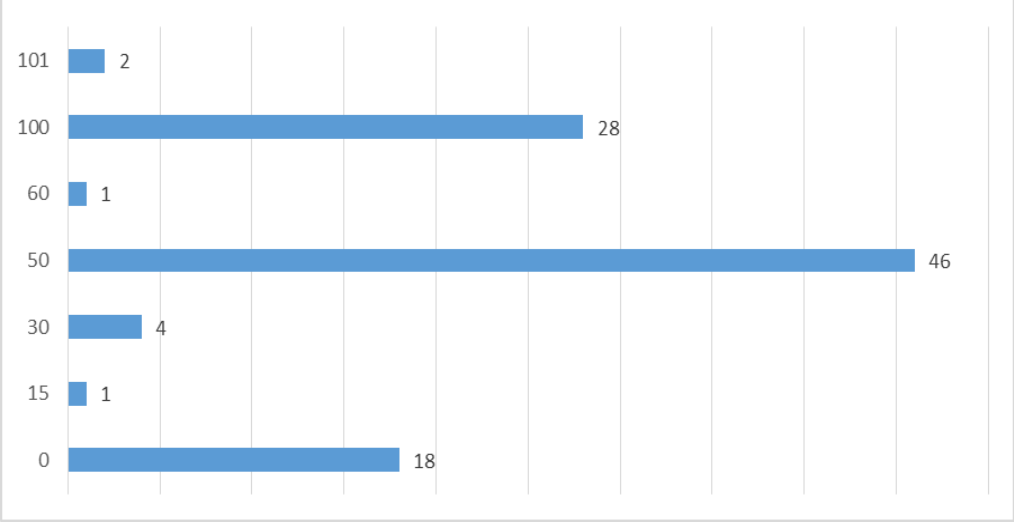


The table displays the frequency distribution of participants consuming brown amaranth seeds, categorized by frequency of consumption, in the study, with a total of 100 respondents. The largest group, 46%, consumes brown amaranth seeds once a week. Participants who never consume it make up 16% of the sample, while those who consume it twice a week constitute 20%. Daily consumers account for 8%, and smaller percentages include 4% rarely, 2% once a month, and 2% thrice a week. Only 1% consume it twice a month or four times a month. The valid percent column matches these percentages, and the cumulative percent column shows the progressive addition of each category, reaching 100% when combined. This distribution indicates a predominant once-a-week consumption pattern among the participants.

TABLE 3.15 Consumption of Amaranth seed brown (quantity-wise)

Valid	Frequency	Percent	Valid Percent	Cumulative Percent
0	18	18.0	18.0	18.0
15	1	1.0	1.0	19.0
30	4	4.0	4.0	23.0
50	46	46.0	46.0	69.0
60	1	1.0	1.0	70.0
100	28	28.0	28.0	98.0
101	2	2.0	2.0	100.0
Total	100	100.0	100.0	

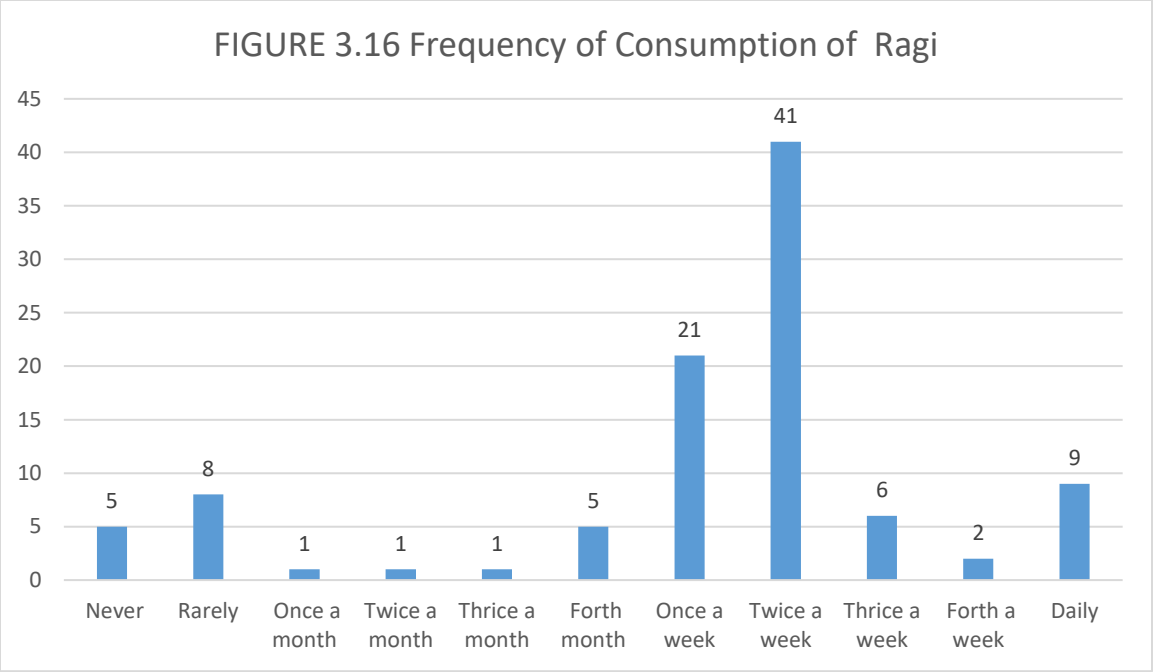
FIGURE 3.15 Consumption of Amaranth seed brown (quantity-wise)



The table shows the frequency distribution of participants consuming pale brown amaranth seeds, measured in quantity/gm, in the study, with a total of 100 respondents. The majority, 46%, consume 50 gm of pale brown amaranth seeds. Participants consuming 100 gm make up 28% of the sample. Those who do not consume any constitute 18%. Smaller portions include 4% who consume 30 gm, 2% who consume 101 gm, and 1% each for 15 gm and 60 gm. The valid percent column confirms these percentages, and the cumulative percent column shows the progressive accumulation of each category, reaching 100% when combined. This distribution indicates that 50 gm is the most common quantity consumed among the participants.

TABLE 3.16 Frequency of Consumption of Ragi

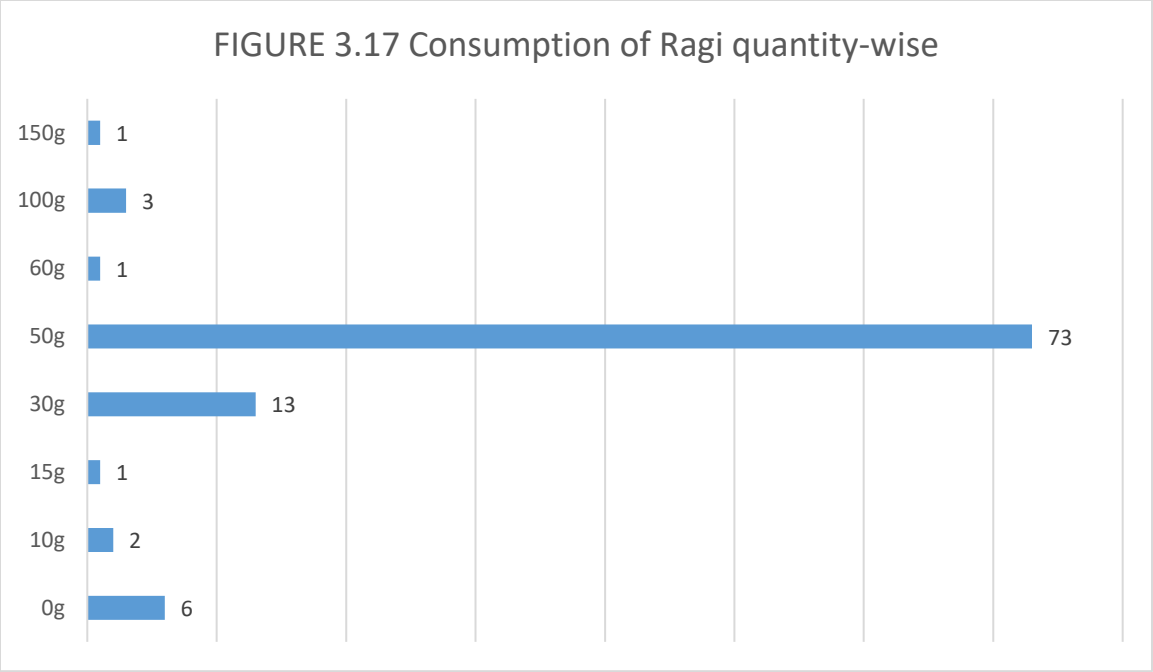
Valid	Frequency	Percent	Valid Percent	Cumulative Percent
Never	5	5.0	5.0	5.0
Rarely	8	8.0	8.0	13.0
Once a month	1	1.0	1.0	14.0
Twice a month	1	1.0	1.0	15.0
Thrice a month	1	1.0	1.0	16.0
Forth month	5	5.0	5.0	21.0
Once a week	21	21.0	21.0	42.0
Twice a week	41	41.0	41.0	83.0
Thrice a week	6	6.0	6.0	89.0
Forth a week	2	2.0	2.0	91.0
Daily	9	9.0	9.0	100.0
Total	100	100.0	100.0	



The table presents the frequency distribution of participants consuming ragi, categorized by frequency of consumption, in the study, with a total of 100 respondents. The largest group, 41%, consumes ragi twice a week. Participants who consume it once a week constitute 21% of the sample, while 9% consume it daily. Those who never consume ragi make up 5%, and 8% consume it rarely. Smaller percentages include 6% consuming it thrice a week, 5% four times a month, and 2% four times a week. Additionally, 1% each consume ragi once, twice, or thrice a month. The valid percent column matches these percentages, and the cumulative percent column shows the progressive addition of each category, reaching 100% when combined. This distribution indicates that twice a week is the most common consumption frequency among the participants.

TABLE 3.17 Consumption of Ragi quantity-wise

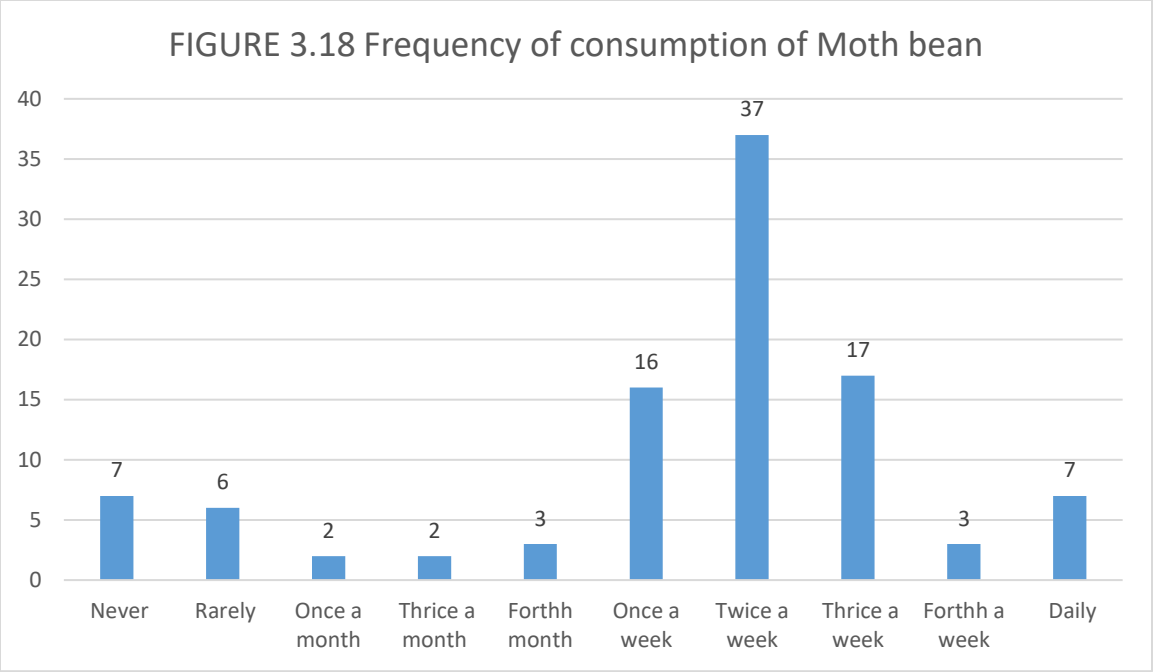
Valid	Frequency	Percent	Valid Percent	Cumulative Percent
0g	6	6.0	6.0	6.0
10g	2	2.0	2.0	8.0
15g	1	1.0	1.0	9.0
30g	13	13.0	13.0	22.0
50g	73	73.0	73.0	95.0
60g	1	1.0	1.0	96.0
100g	3	3.0	3.0	99.0
150g	1	1.0	1.0	100.0
Total	100	100.0	100.0	



The table shows the frequency distribution of participants consuming ragi, measured in quantity/gm, in the study, with a total of 100 respondents. The majority, 73%, consume 50 gm of ragi. A smaller portion, 13%, consume 30 gm, while 6% do not consume any. Other quantities consumed include 3% who consume 100 gm, 2% who consume 10 gm, and 1% each for 15 gm, 60 gm, and 150 gm. The valid percent column confirms these percentages, and the cumulative percent column shows the progressive accumulation of each category, reaching 100% when combined. This distribution indicates that 50 gm is the most commonly consumed quantity among the participants.

TABLE 3.18 Frequency of consumption of Moth bean

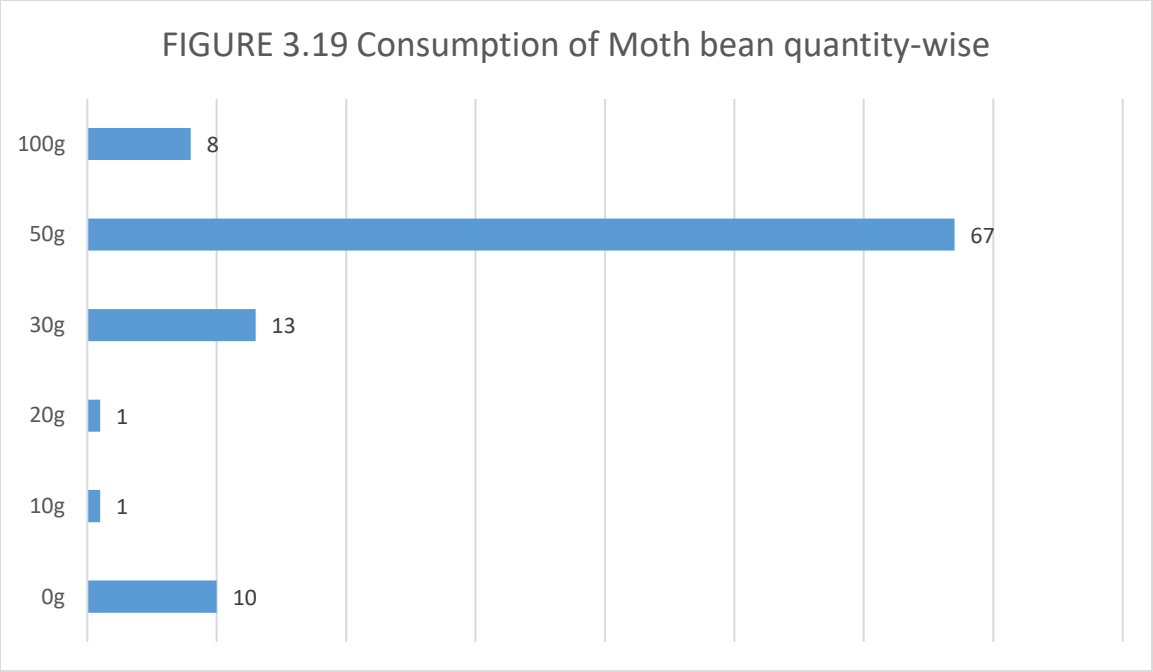
Valid	Frequency	Percent	Valid Percent	Cumulative Percent
Never	7	3.0	3.0	3.0
Rarely	6	6.0	6.0	13.0
Once a month	2	2.0	2.0	15.0
Thrice a month	2	2.0	2.0	13.0
Fourth month	3	3.0	3.0	20.0
Once a week	16	16.0	16.0	36.0
Twice a week	37	33.0	33.0	73.0
Thrice a week	17	13.0	13.0	90.0
Fourth a week	3	3.0	3.0	93.0
Daily	7	3.0	3.0	100.0



The table displays the frequency distribution of participants consuming moth beans, categorized by frequency of consumption, in the study, with a total of 100 respondents. The largest group, 37%, consumes moth beans twice a week. Participants who consume them thrice a week constitute 17% of the sample, while 16% consume them once a week. Those who never consume moth beans make up 7%, and 7% consume them daily. Smaller percentages include 6% consuming them rarely, 3% four times a week or once a month, and 2% thrice a month. Additionally, 3% consume them four times a month. The valid percent column matches these percentages, and the cumulative percent column shows the progressive addition of each category, reaching 100% when combined. This distribution indicates that consuming moth beans twice a week is the most common frequency among the participants.

TABLE 3.19 Consumption of Moth bean quantity-wise

Valid	Frequency	Percent	Valid Percent	Cumulative Percent
0g	10	10.0	10.0	10.0
10g	1	1.0	1.0	11.0
20g	1	1.0	1.0	12.0
30g	13	13.0	13.0	25.0
50g	67	63.0	63.0	92.0
100g	8	8.0	8.0	100.0
Total	100	100.0	100.0	

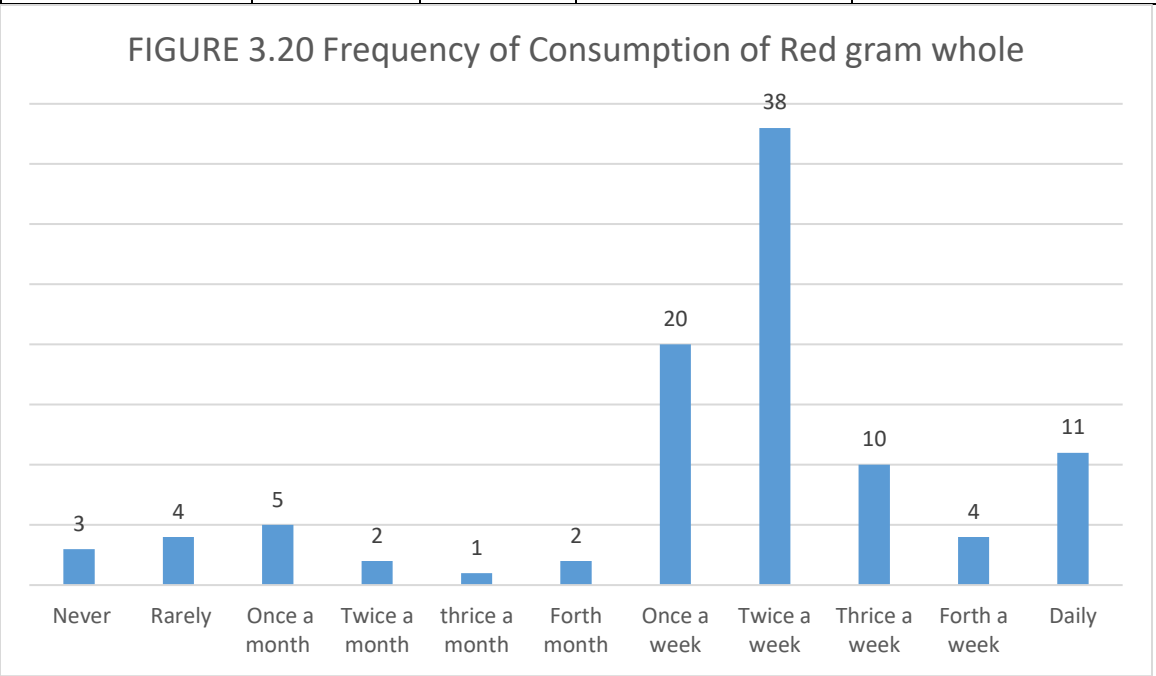


The table shows the frequency distribution of participants consuming moth beans, measured in quantity/gm or ml, in the study, with a total of 100 respondents. The majority, 67%, consume 50 gm or ml of moth beans. Participants consuming 100 gm or ml make up 8% of the sample. Those who do not consume any constitute 10%. Smaller portions include 13% who consume 30 gm or ml, and 1% each for 10 gm or ml, 20 gm or ml, and 100 gm or ml. The valid percent column confirms these percentages, and the cumulative percent column shows the progressive accumulation of each category, reaching 100% when combined. This distribution indicates that 50 gm or ml is the most commonly consumed quantity among the participants.

TABLE 3.20 Frequency of Consumption of Red gram whole

Valid	Frequency	Percent	Valid Percent	Cumulative Percent
Never	3	3.0	3.0	3.0
Rarely	4	4.0	4.0	3.0
Once a month	5	5.0	5.0	12.0
Twice a month	2	2.0	2.0	14.0
thrice a month	1	1.0	1.0	15.0
Forth month	2	2.0	2.0	13.0
Once a week	20	20.0	20.0	33.0
Twice a week	38	38.0	38.0	75.0
Thrice a week	10	10.0	10.0	85.0
Forth a week	4	4.0	4.0	89.0
Daily	11	11.0	11.0	100.0

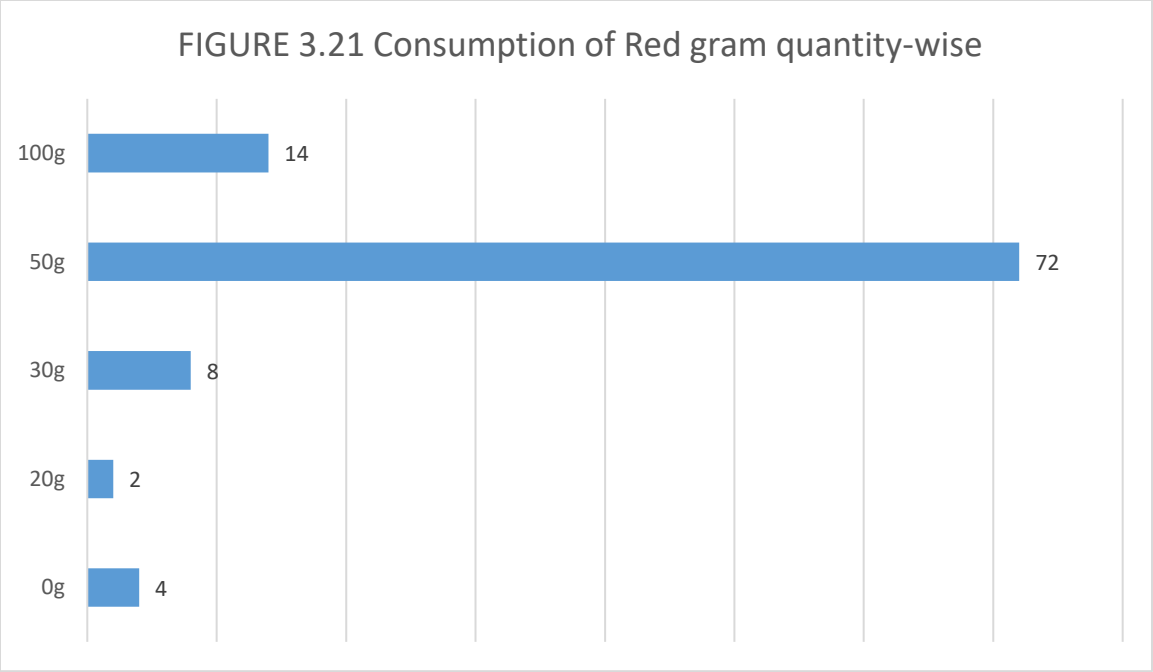
Total	100	100.0	100.0	



The table presents the frequency distribution of participants consuming whole red gram, categorized by frequency of consumption, in the study, with a total of 100 respondents. The largest group, 38%, consumes whole red gram twice a week. Participants who consume it once a week constitute 20% of the sample, while 11% consume it daily. Those who never consume whole red gram make up 3%, and 10% consume it thrice a week. Smaller percentages include 5% consuming it once a month, 4% twice a month, and 4% four times a week. Additionally, 2% consume it four times a month or rarely, and 1% consume it thrice a month. The valid percent column matches these percentages, and the cumulative percent column shows the progressive addition of each.

TABLE 3.21 Consumption of Red gram quantity-wise

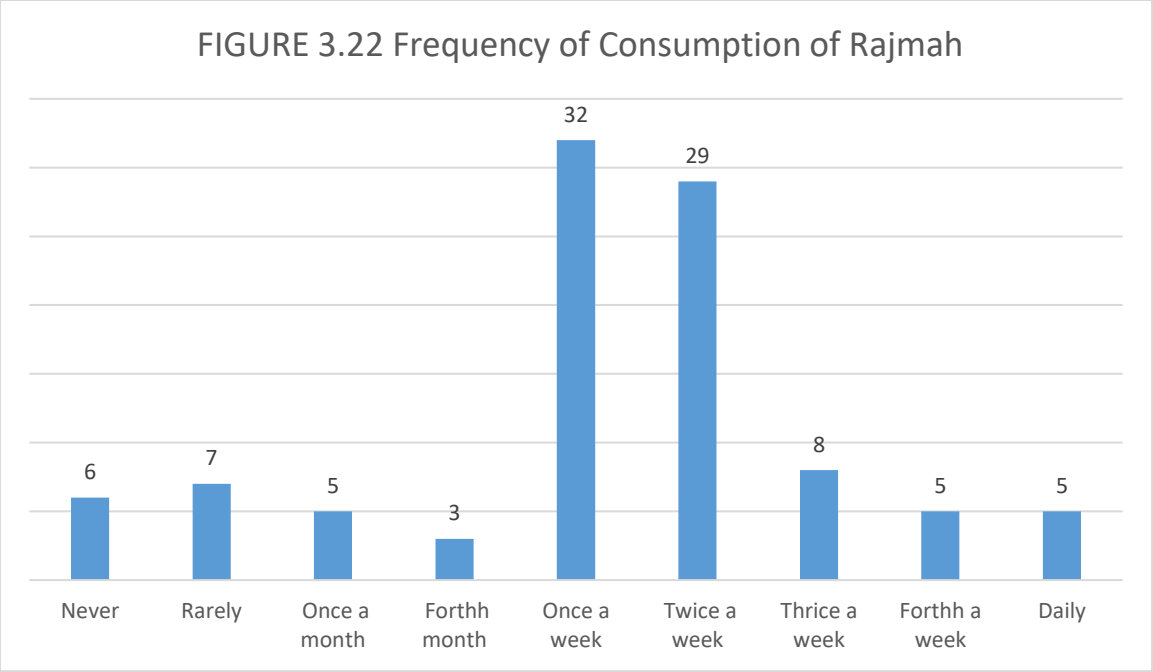
Valid	Frequency	Percent	Valid Percent	Cumulative Percent
0g	4	4.0	4.0	4.0
20g	2	2.0	2.0	6.0
30g	8	8.0	8.0	14.0
50g	72	72.0	72.0	86.0
100g	14	14.0	14.0	100.0
Total	100	100.0	100.0	



The table displays the frequency distribution of participants consuming whole red gram, measured in quantity/gm or ml, in the study, with a total of 100 respondents. The majority, 72%, consume 50 gm or ml of whole red gram. Participants consuming 100 gm or ml make up 14% of the sample. Those who do not consume any constitute 4%. Smaller portions include 8% who consume 30 gm or ml, and 2% each for 20 gm or ml. The valid percent column confirms these percentages, and the cumulative percent column shows the progressive accumulation of each category, reaching 100% when combined. This distribution indicates that 50 gm or ml is the most commonly consumed quantity among the participants.

TABLE 3.22 Frequency of Consumption of Rajmah

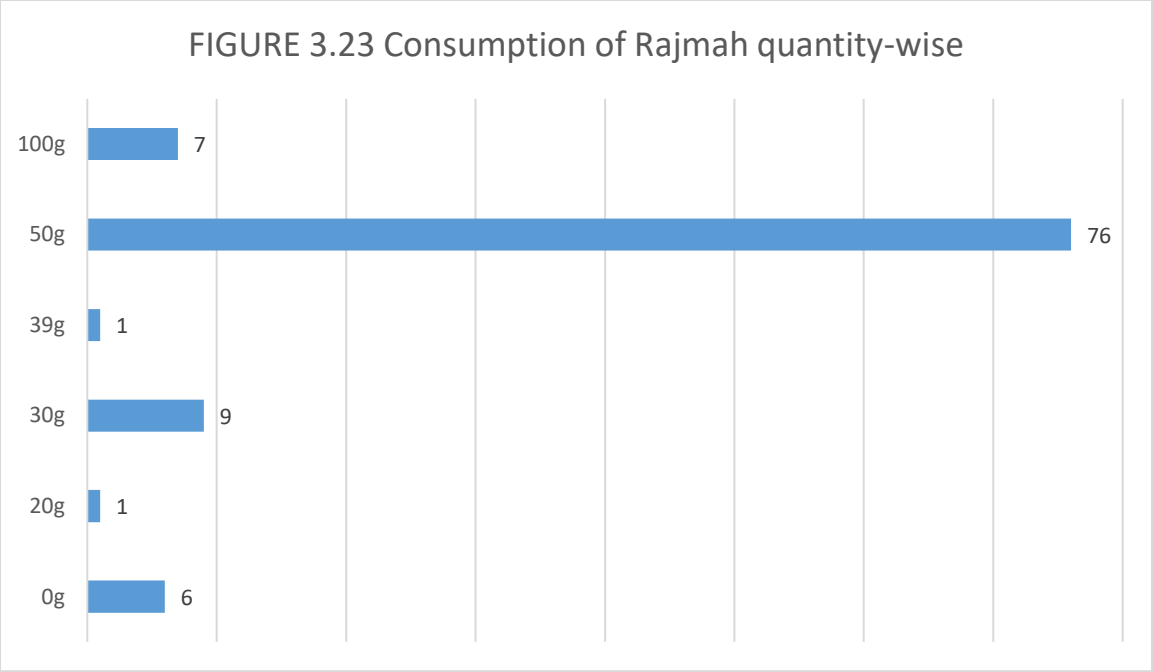
Valid	Frequency	Percent	Valid Percent	Cumulative Percent
Never	6	6.0	6.0	6.0
Rarely	7	3.0	3.0	13.0
Once a month	5	5.0	5.0	18.0
Fourth month	3	3.0	3.0	21.0
Once a week	32	32.0	32.0	53.0
Twice a week	29	29.0	29.0	82.0
Thrice a week	8	8.0	8.0	90.0
Fourth a week	5	5.0	5.0	95.0
Daily	5	5.0	5.0	100.0
Total	100	100.0	100.0	



The table presents the frequency distribution of participants consuming rajma, categorized by frequency of consumption, in the study, with a total of 100 respondents. The largest group, 32%, consumes rajma once a week. Participants who consume it twice a week constitute 29% of the sample, while 8% consume it thrice a week. Those who never consume rajma make up 6%, and 5% consume it daily. Smaller percentages include 7% consuming it rarely, 5% four times a week or once a month, and 3% four times a month. The valid percent column matches these percentages, and the cumulative percent column shows the progressive addition of each category, reaching 100% when combined. This distribution indicates that consuming rajma once a week is the most common frequency among the participants.

TABLE 3.23 Consumption of Rajmah quantity-wise

Valid	Frequency	Percent	Valid Percent	Cumulative Percent
0g	6	6.0	6.0	6.0
20g	1	1.0	1.0	3.0
30g	9	9.0	9.0	16.0
39g	1	1.0	1.0	13.0
50g	76	76.0	76.0	93.0
100g	7	3.0	3.0	100.0
Total	100	100.0	100.0	

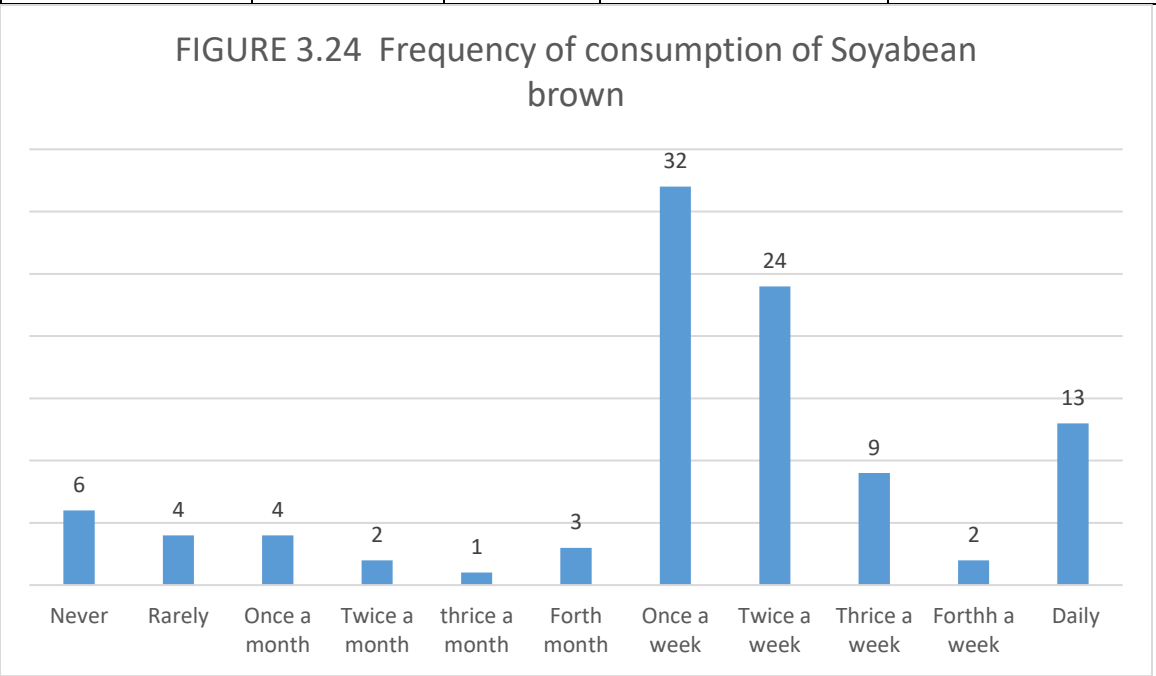


The table displays the frequency distribution of participants consuming rajma, measured in quantity/gm or ml, in the study, with a total of 100 respondents. The majority, 76%, consume 50 gm or ml of rajma. Participants consuming 100 gm or ml make up 7% of the sample. Those who do not consume any constitute 6%. Smaller portions include 9% who consume 30 gm or ml, and 1% each for 20 gm or ml and 39 gm or ml. The valid percent column confirms these percentages, and the cumulative percent column shows the progressive accumulation of each category, reaching 100% when combined. This distribution indicates that 50 gm or ml is the most commonly consumed quantity among the participants.

TABLE 3. 24 Frequency of consumption of Soyabean brown

Valid	Frequency	Percent	Valid Percent	Cumulative Percent
Never	6	6.0	6.0	6.0
Rarely	4	4.0	4.0	10.0
Once a month	4	4.0	4.0	14.0
Twice a month	2	2.0	2.0	16.0
thrice a month	1	1.0	1.0	13.0
Forth month	3	3.0	3.0	20.0
Once a week	32	32.0	32.0	52.0
Twice a week	24	24.0	24.0	76.0
Thrice a week	9	9.0	9.0	85.0
Fourth a week	2	2.0	2.0	83.0
Daily	13	13.0	13.0	100.0

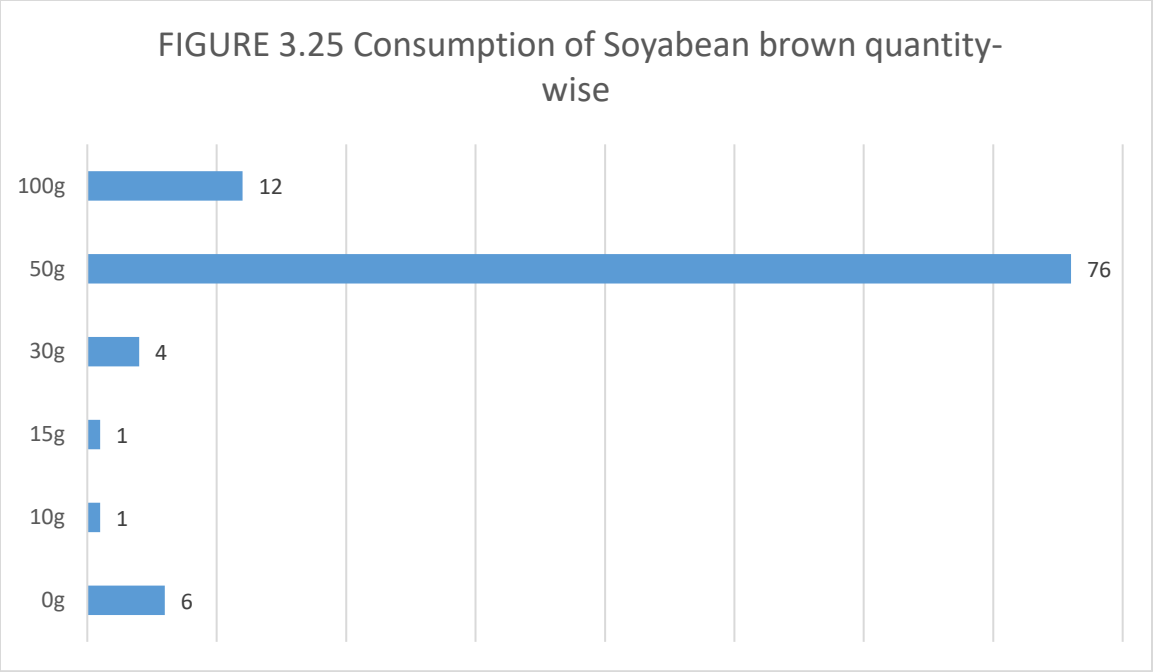
Total	100	100.0	100.0	



The table presents the frequency distribution of participants consuming brown soybeans, categorized by frequency of consumption, in the study, with a total of 100 respondents. The largest group, 32%, consumes brown soybeans once a week. Participants who consume them twice a week constitute 24% of the sample, while 13% consume them daily. Those who never consume brown soybeans make up 6%, and 9% consume them thrice a week. Smaller percentages include 4% consuming them rarely, 4% once a month, and 3% four times a month or once a month. Additionally, 2% consume them twice a month or four times a week. The valid percent column matches these percentages, and the cumulative percent column shows the progressive addition of each category.

TABLE 3.25 Consumption of Soyabean brown quantity-wise

Valid	Frequency	Percent	Valid Percent	Cumulative Percent
0g	6	6.0	6.0	6.0
10g	1	1.0	1.0	3.0
15g	1	1.0	1.0	8.0
30g	4	4.0	4.0	12.0
50g	76	76.0	76.0	88.0
100g	12	12.0	12.0	100.0
Total	100	100.0	100.0	

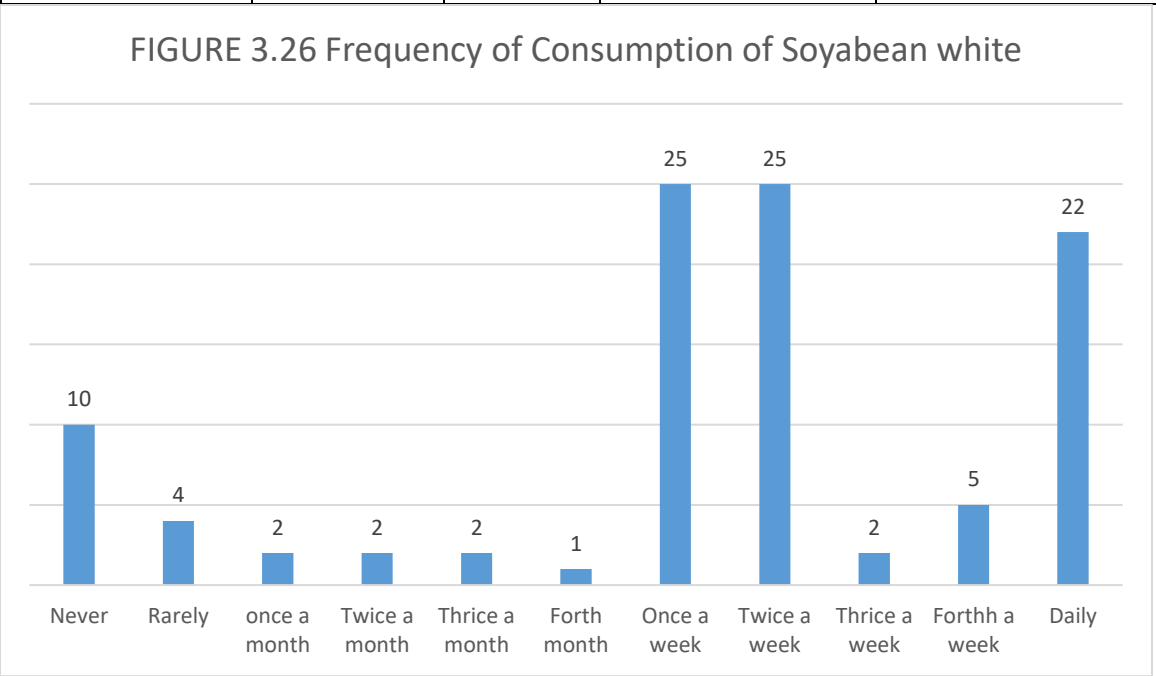


The table displays the frequency distribution of participants consuming brown soybeans, measured in quantity/gm or ml, in the study, with a total of 100 respondents. The majority, 76%, consume 50 gm or ml of brown soybeans. Participants consuming 100 gm or ml make up 12% of the sample. Those who do not consume any constitute 6%. Smaller portions include 4% who consume 30 gm or ml, and 1% each for 10 gm or ml and 15 gm or ml. The valid percent column confirms these percentages, and the cumulative percent column shows the progressive accumulation of each category, reaching 100% when combined. This distribution indicates that 50 gm or ml is the most commonly consumed quantity among the participants.

TABLE 3.26 Frequency of Consumption of Soyabean white

Valid	Frequency	Percent	Valid Percent	Cumulative Percent
Never	10	10.0	10.0	10.0
Rarely	4	4.0	4.0	14.0
once a month	2	2.0	2.0	16.0
Twice a month	2	2.0	2.0	18.0
Thrice a month	2	2.0	2.0	20.0
Forth month	1	1.0	1.0	21.0
Once a week	25	25.0	25.0	46.0
Twice a week	25	25.0	25.0	71.0
Thrice a week	2	2.0	2.0	73.0
Fourth a week	5	5.0	5.0	78.0
Daily	22	22.0	22.0	100.0

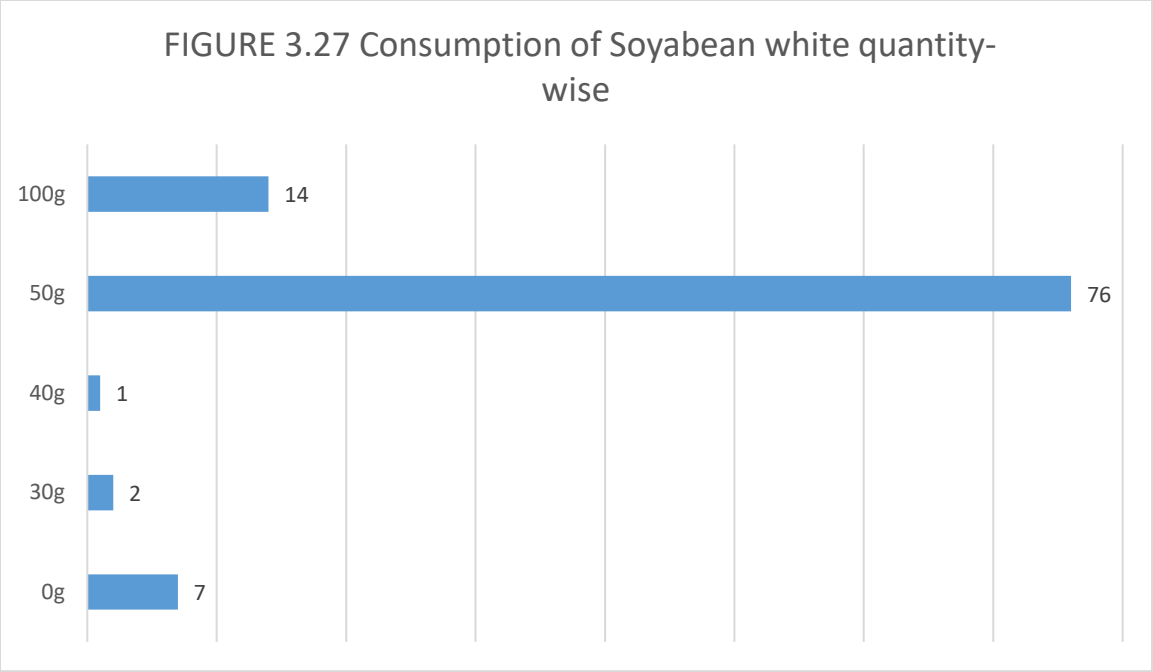
Total	100	100.0	100.0	



The table presents the frequency distribution of participants consuming white soybeans, categorized by frequency of consumption, in the study, with a total of 100 respondents. The largest group, 25%, consumes white soybeans both once and twice a week. Participants who consume them daily constitute 22% of the sample, while 5% consume them four times a week. Those who never consume white soybeans make up 10%, and 4% consume them rarely. Smaller percentages include 2% each consuming them once, twice, or thrice a month, and 1% consuming them four times a month. The valid percent column matches these percentages, and the cumulative percent column shows the progressive addition of each category, reaching 100% when combined.

TABLE 3.27 Consumption of Soyabean white quantity-wise

Valid	Frequency	Percent	Valid Percent	Cumulative Percent
0g	7	3.0	3.0	3.0
30g	2	2.0	2.0	9.0
40g	1	1.0	1.0	10.0
50g	76	76.0	76.0	86.0
100g	14	14.0	14.0	100.0
Total	100	100.0	100.0	

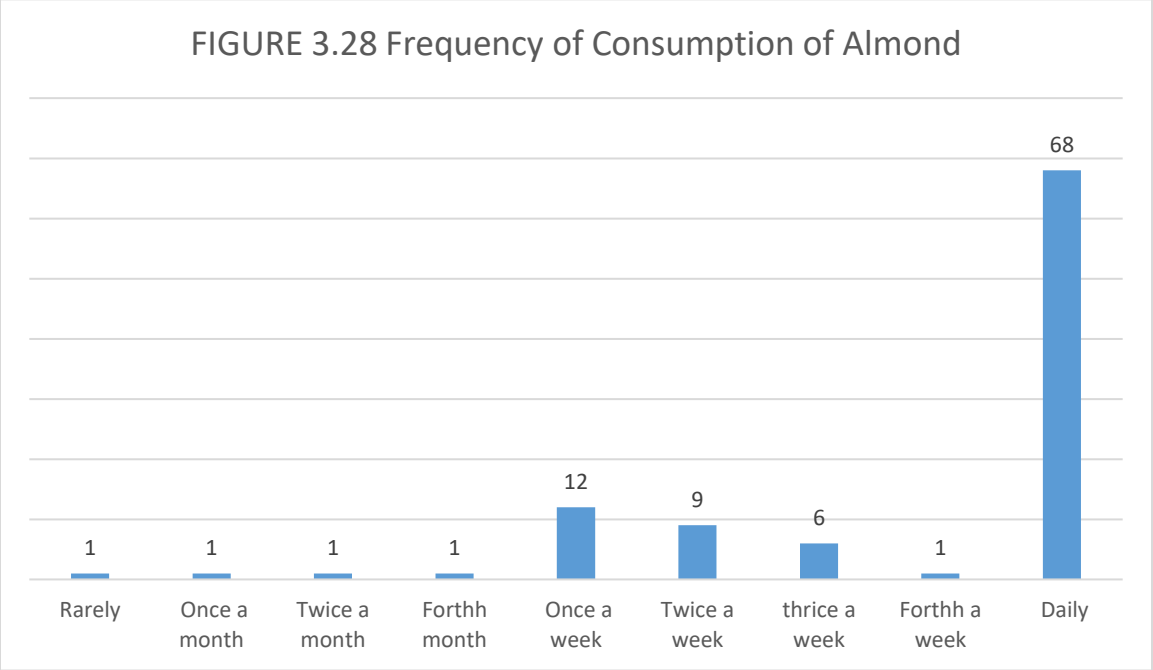


The table displays the frequency distribution of participants consuming white soybeans, measured in quantity/gm or ml, in the study, with a total of 100 respondents. The majority, 76%, consume 50 gm or ml of white soybeans. Participants consuming 100 gm or ml make up 14% of the sample. Those who do not consume any constitute 7%. Smaller portions include 2% who consume 30 gm or ml, and 1% each for 40 gm or ml. The valid percent column confirms these percentages, and the cumulative percent column shows the progressive accumulation of each category, reaching 100% when combined. This distribution indicates that 50 gm or ml is the most commonly consumed quantity among the participants.

TABLE 3. 28 Frequency of Consumption of Almond

Valid	Frequency	Percent	Valid Percent	Cumulative Percent
Rarely	1	1.0	1.0	1.0
Once a month	1	1.0	1.0	2.0
Twice a month	1	1.0	1.0	3.0
Fourth month	1	1.0	1.0	4.0
Once a week	12	12.0	12.0	16.0
Twice a week	9	9.0	9.0	25.0
thrice a week	6	6.0	6.0	31.0
Fourth a week	1	1.0	1.0	32.0
Daily	68	68.0	68.0	100.0

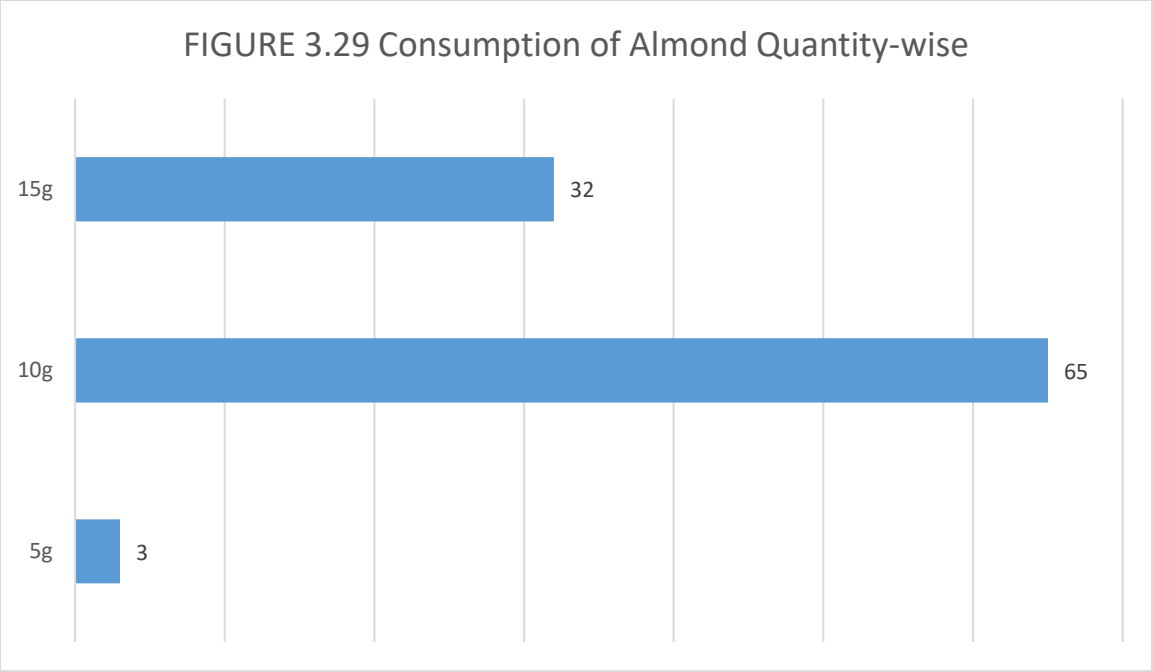
Total	100	100.0	100.0	



The table presents the frequency distribution of participants consuming almonds, categorized by frequency of consumption, in the study, with a total of 100 respondents. The largest group, 68%, consumes almonds daily. Participants who consume them once a week constitute 12% of the sample, while 9% consume them twice a week. Those who consume almonds thrice a week make up 6% of the sample. Smaller percentages include 1% consuming them rarely, once a month, twice a month, or four times a month, and 1% consuming them four times a week. The valid percent column matches these percentages, and the cumulative percent column shows the progressive addition of each category, reaching 100% when combined. This distribution indicates that consuming almonds daily is the most common frequency among the participants.

TABLE 3.29 Consumption of Almond Quantity-wise

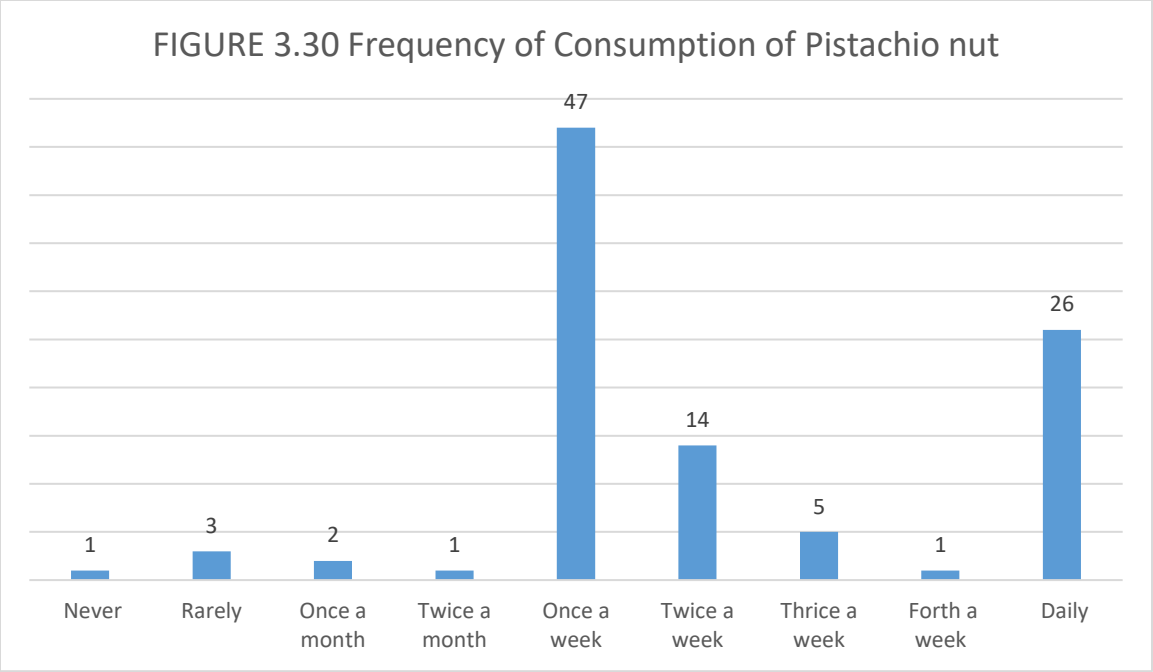
Valid	Frequency	Percent	Valid Percent	Cumulative Percent
5g	3	3.0	3.0	3.0
10g	65	65.0	65.0	68.0
15g	32	32.0	32.0	100.0
Total	100	100.0	100.0	



The table displays the frequency distribution of participants consuming almonds, measured in quantity/gm or ml, in the study, with a total of 100 respondents. The majority, 65%, consume 10 gm or ml of almonds. Participants consuming 15 gm or ml make up 32% of the sample. Those consuming 5 gm or ml constitute 3% of the sample. The valid percent column confirms these percentages, and the cumulative percent column shows the progressive accumulation of each category, reaching 100% when combined. This distribution indicates that 10 gm or ml is the most commonly consumed quantity among the participants.

TABLE 3. 30 Frequency of Consumption of Pistachio nut

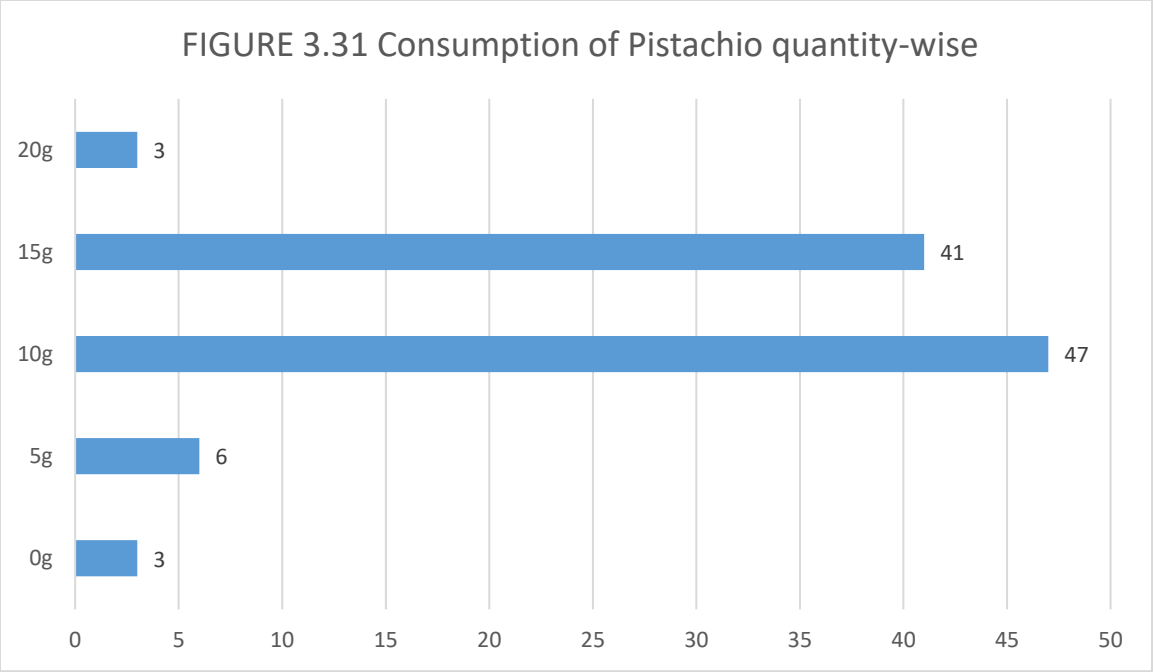
Valid	Frequency	Percent	Valid Percent	Cumulative Percent
Never	1	1.0	1.0	1.0
Rarely	3	3.0	3.0	4.0
Once a month	2	2.0	2.0	6.0
Twice a month	1	1.0	1.0	3.0
Once a week	47	43.0	43.0	54.0
Twice a week	14	14.0	14.0	68.0
Thrice a week	5	5.0	5.0	73.0
Forth a week	1	1.0	1.0	74.0
Daily	26	26.0	26.0	100.0
Total	100	100.0	100.0	



The table presents the frequency distribution of participants consuming pistachio nuts, categorized by frequency of consumption, in the study, with a total of 100 respondents. The largest group, 47%, consumes pistachio nuts once a week. Participants who consume them daily constitute 26% of the sample, while 14% consume them twice a week. Those who never consume pistachio nuts make up 1%, and 5% consume them thrice a week. Smaller percentages include 3% consuming them rarely, 2% once a month, and 1% each for twice a month or four times a week. The valid percent column matches these percentages, and the cumulative percent column shows the progressive addition of each category, reaching 100% when combined.

TABLE 3.31 Consumption of Pistachio quantity-wise

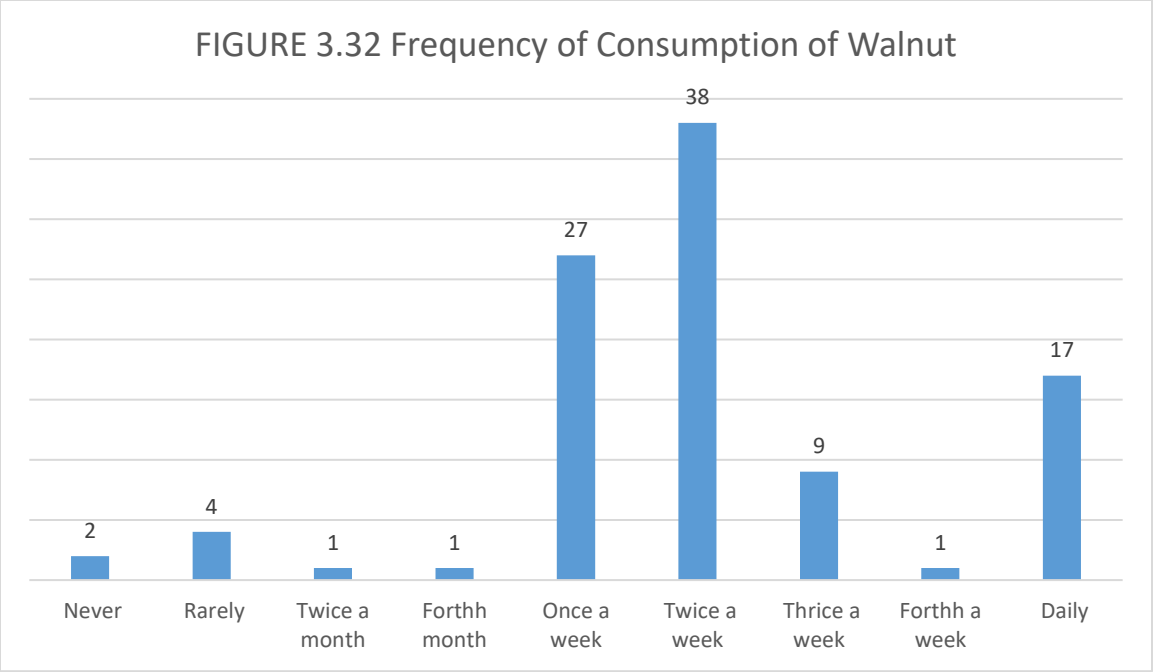
Valid	Frequency	Percent	Valid Percent	Cumulative Percent
0g	3	3.0	3.0	3.0
5g	6	6.0	6.0	9.0
10g	47	43.0	43.0	56.0
15g	41	41.0	41.0	93.0
20g	3	3.0	3.0	100.0
Total	100	100.0	100.0	



The table displays the frequency distribution of participants consuming pistachio nuts, measured in quantity/gm or ml, in the study, with a total of 100 respondents. The majority, 47%, consume 10 gm or ml of pistachio nuts. Participants consuming 15 gm or ml make up 41% of the sample. Those consuming 5 gm or ml constitute 6% of the sample, while 3% consume 0 gm or ml and 3% consume 20 gm or ml. The valid percent column confirms these percentages, and the cumulative percent column shows the progressive accumulation of each category, reaching 100% when combined. This distribution indicates that 10 gm or ml is the most commonly consumed quantity among the participants.

TABLE 3.32 Frequency of Consumption of Walnut

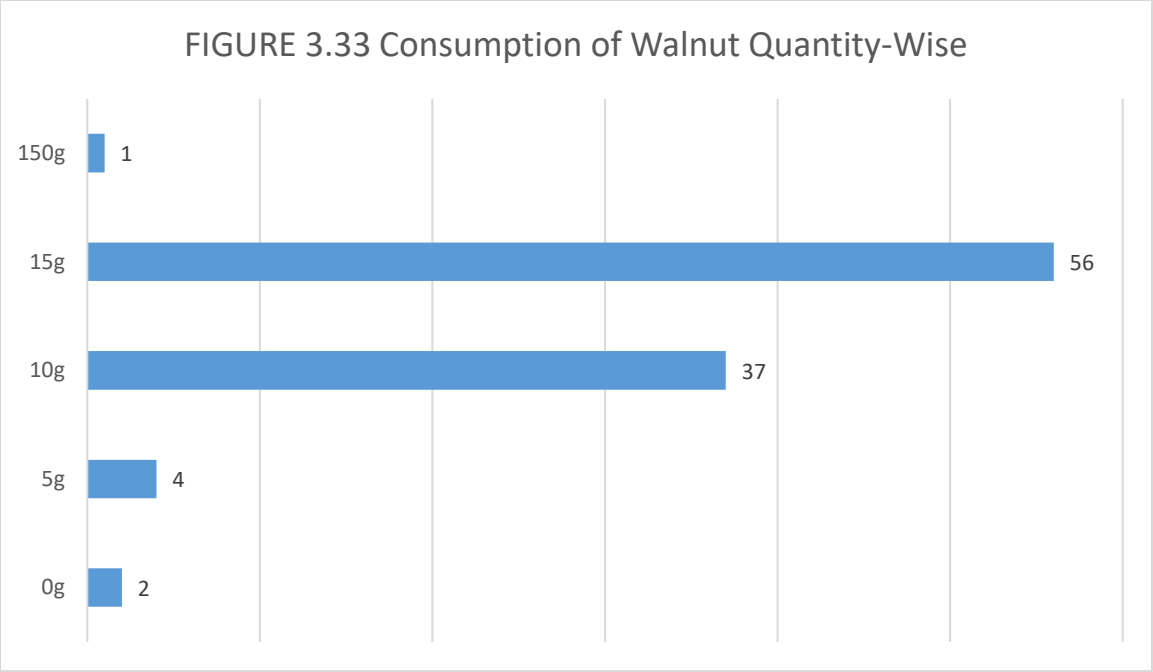
Valid	Frequency	Percent	Valid Percent	Cumulative Percent
Never	2	2.0	2.0	2.0
Rarely	4	4.0	4.0	6.0
Twice a month	1	1.0	1.0	3.0
Fourth month	1	1.0	1.0	8.0
Once a week	27	23.0	23.0	35.0
Twice a week	38	38.0	38.0	73.0
Thrice a week	9	9.0	9.0	82.0
Fourth a week	1	1.0	1.0	83.0
Daily	17	13.0	13.0	100.0
Total	100	100.0	100.0	



The table presents the frequency distribution of participants consuming walnuts, categorized by frequency of consumption, in the study, with a total of 100 respondents. The largest group, 38%, consumes walnuts twice a week. Participants who consume them daily constitute 17% of the sample, while 27% consume them once a week. Those who consume walnuts thrice a week make up 9% of the sample. Smaller percentages include 4% consuming them rarely, and 1% each for twice a month, four times a month, and four times a week. The valid percent column matches these percentages, and the cumulative percent column shows the progressive addition of each category, reaching 100% when combined. This distribution indicates that consuming walnuts twice a week is the most common frequency among the participants.

TABLE 3.33 Consumption of Walnut Quantity-Wise

Valid	Frequency	Percent	Valid Percent	Cumulative Percent
0g	2	2.0	2.0	2.0
5g	4	4.0	4.0	6.0
10g	37	33.0	33.0	43.0
15g	56	56.0	56.0	99.0
150g	1	1.0	1.0	100.0
Total	100	100.0	100.0	

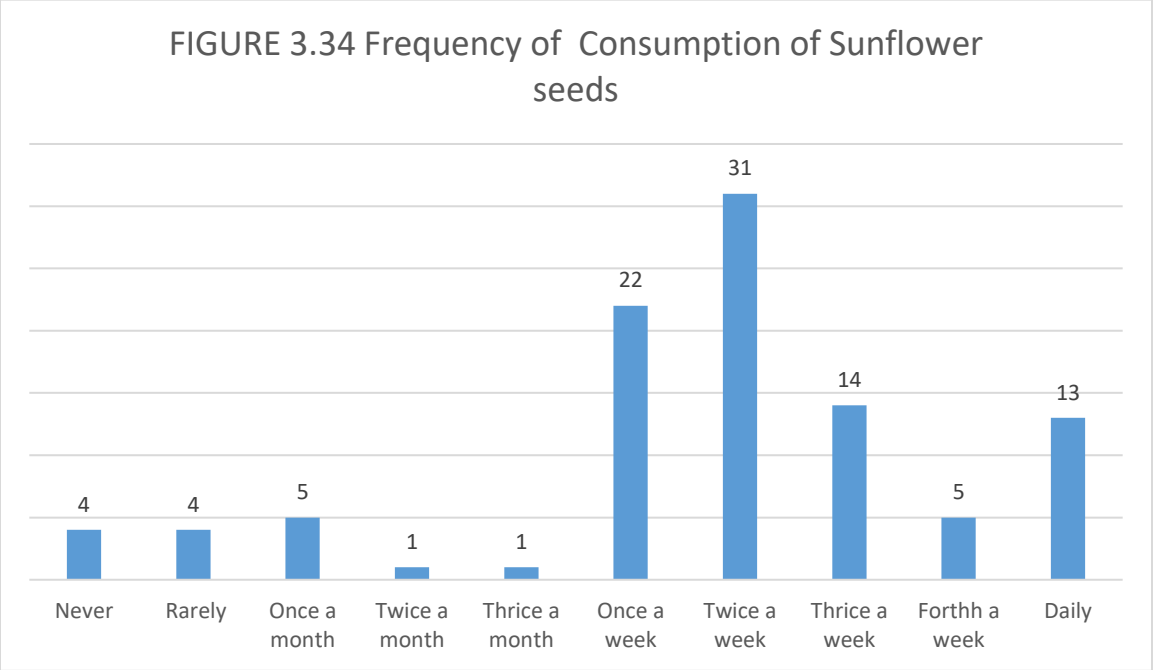


The table displays the frequency distribution of participants consuming walnuts, measured in quantity/gm or ml, in the study, with a total of 100 respondents. The majority, 56%, consume 15 gm or ml of walnuts. Participants consuming 10 gm or ml make up 37% of the sample. Those consuming 5 gm or ml constitute 4% of the sample, while 2% consume 0 gm or ml and 1% consume 150 gm or ml. The valid percent column confirms these percentages, and the cumulative percent column shows the progressive accumulation of each category, reaching 100% when combined. This distribution indicates that 15 gm or ml is the most commonly consumed quantity among the participants.

TABLE 3. 34 Frequency of Consumption of Sunflower seeds

Valid	Frequency	Percent	Valid Percent	Cumulative Percent
Never	4	4.0	4.0	4.0
Rarely	4	4.0	4.0	8.0

Once a month	5	5.0	5.0	13.0
Twice a month	1	1.0	1.0	14.0
Thrice a month	1	1.0	1.0	15.0
Once a week	22	22.0	22.0	33.0
Twice a week	31	31.0	31.0	68.0
Thrice a week	14	14.0	14.0	82.0
Fourth a week	5	5.0	5.0	83.0
Daily	13	13.0	13.0	100.0
Total	100	100.0	100.0	

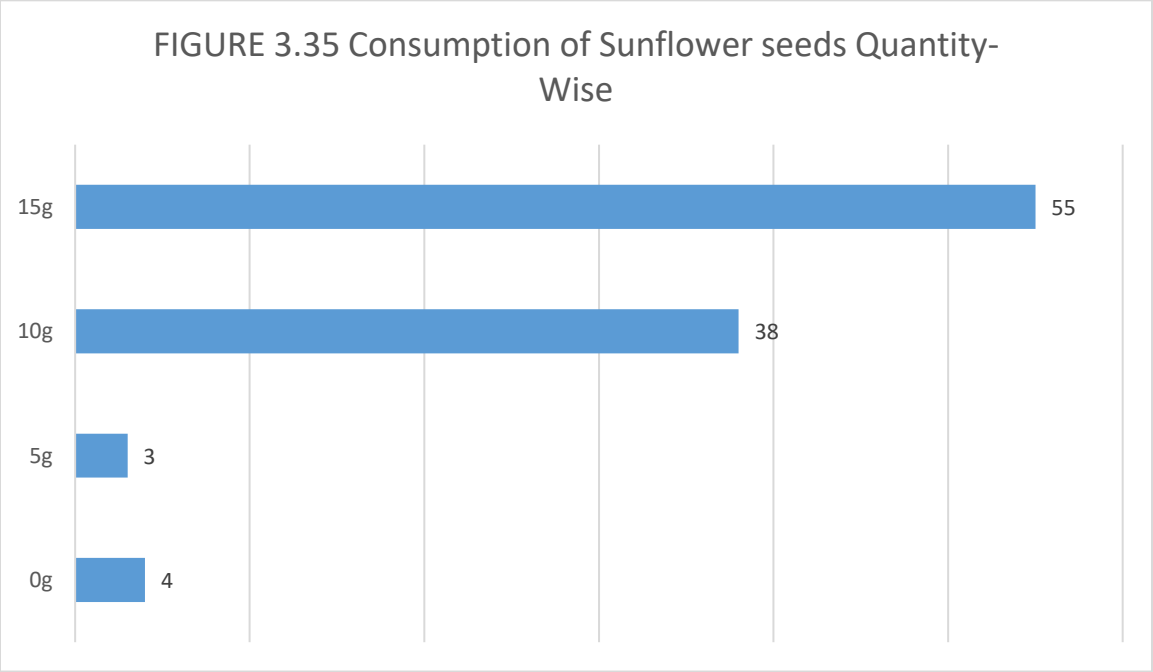


The table presents the frequency distribution of participants consuming sunflower seeds, categorized by frequency of consumption, in the study, with a total of 100 respondents. The largest group, 31%, consumes sunflower seeds twice a week. Participants who consume them once a week constitute 22% of the sample, while 13% consume them daily. Those who never consume sunflower seeds make up 4%, and 14% consume them thrice a week. Smaller percentages include 4% consuming them rarely, 5% once a month, and 1% each for twice a month, thrice a month, and four times a week. The valid percent column matches these percentages, and the cumulative percent column shows the progressive addition of each category, reaching 100% when combined. This d…

TABLE 3. 35 Consumption of Sunflower seeds Quantity-Wise

Valid	Frequency	Percent	Valid Percent	Cumulative Percent
0g	4	4.0	4.0	4.0

5g	3	3.0	3.0	3.0
10g	38	38.0	38.0	45.0
15g	55	55.0	55.0	100.0
Total	100	100.0	100.0	

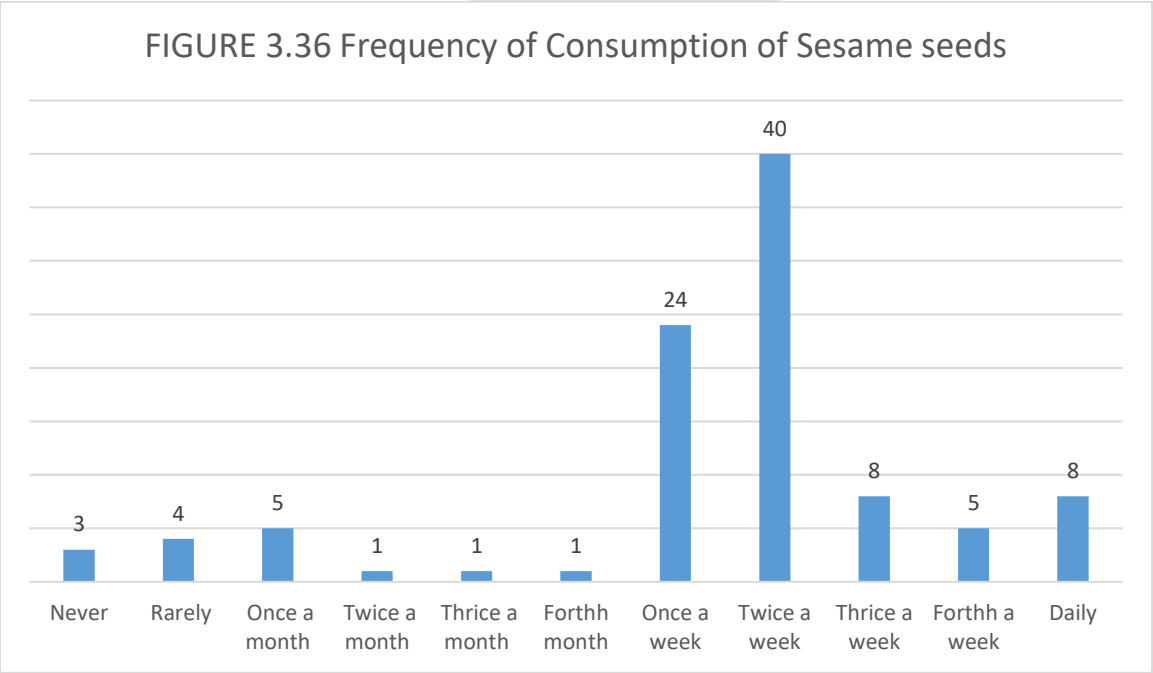


The table displays the frequency distribution of participants consuming sunflower seeds, measured in quantity/gm or ml, in the study, with a total of 100 respondents. The majority, 55%, consume 15 gm or ml of sunflower seeds. Participants consuming 10 gm or ml make up 38% of the sample. Those consuming 5 gm or ml constitute 3% of the sample, while 4% consume 0 gm or ml. The valid percent column confirms these percentages, and the cumulative percent column shows the progressive accumulation of each category, reaching 100% when combined. This distribution indicates that 15 gm or ml is the most commonly consumed quantity among the participants.

TABLE 3.36 Frequency of Consumption of Sesame seeds

Valid	Frequency	Percent	Valid Percent	Cumulative Percent
Never	3	3.0	3.0	3.0
Rarely	4	4.0	4.0	3.0
Once a month	5	5.0	5.0	12.0
Twice a month	1	1.0	1.0	13.0
Thrice a month	1	1.0	1.0	14.0
Fourth month	1	1.0	1.0	15.0

Once a week	24	24.0	24.0	39.0
Twice a week	40	40.0	40.0	79.0
Thrice a week	8	8.0	8.0	83.0
Fourth a week	5	5.0	5.0	92.0
Daily	8	8.0	8.0	100.0
Total	100	100.0	100.0	

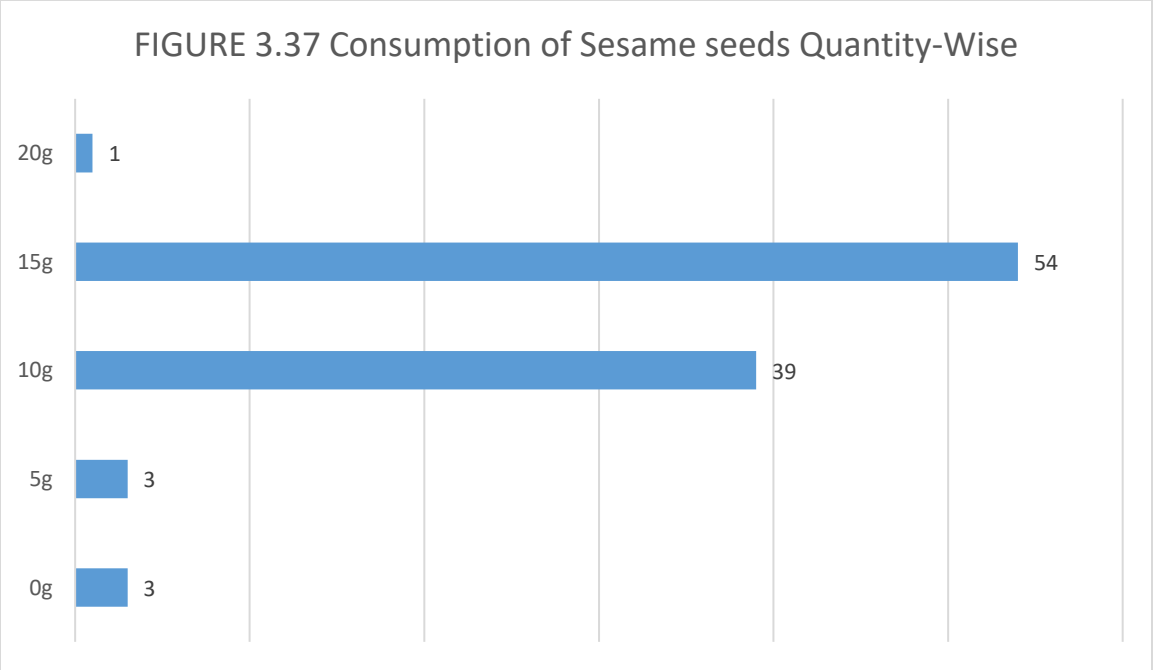


The table presents the frequency distribution of participants consuming sesame seeds, categorized by frequency of consumption, in the study, with a total of 100 respondents. The largest group, 40%, consumes sesame seeds twice a week. Participants who consume them once a week constitute 24% of the sample, while 8% consume them thrice a week. Those who consume sesame seeds daily make up 8% of the sample. Smaller percentages include 5% consuming them four times a week, 5% once a month, and 1% each for twice a month, thrice a month, and four times a month. The valid percent column matches these percentages, and the cumulative percent column shows the progressive addition of each category, reaching 100% when combined.

TABLE 3.37 Consumption of Sesame seeds Quantity-Wise

Valid	Frequency	Percent	Valid Percent	Cumulative Percent
0g	3	3.0	3.0	3.0

5g	3	3.0	3.0	6.0
10g	39	39.0	39.0	45.0
15g	54	54.0	54.0	99.0
20g	1	1.0	1.0	100.0
Total	100	100.0	100.0	

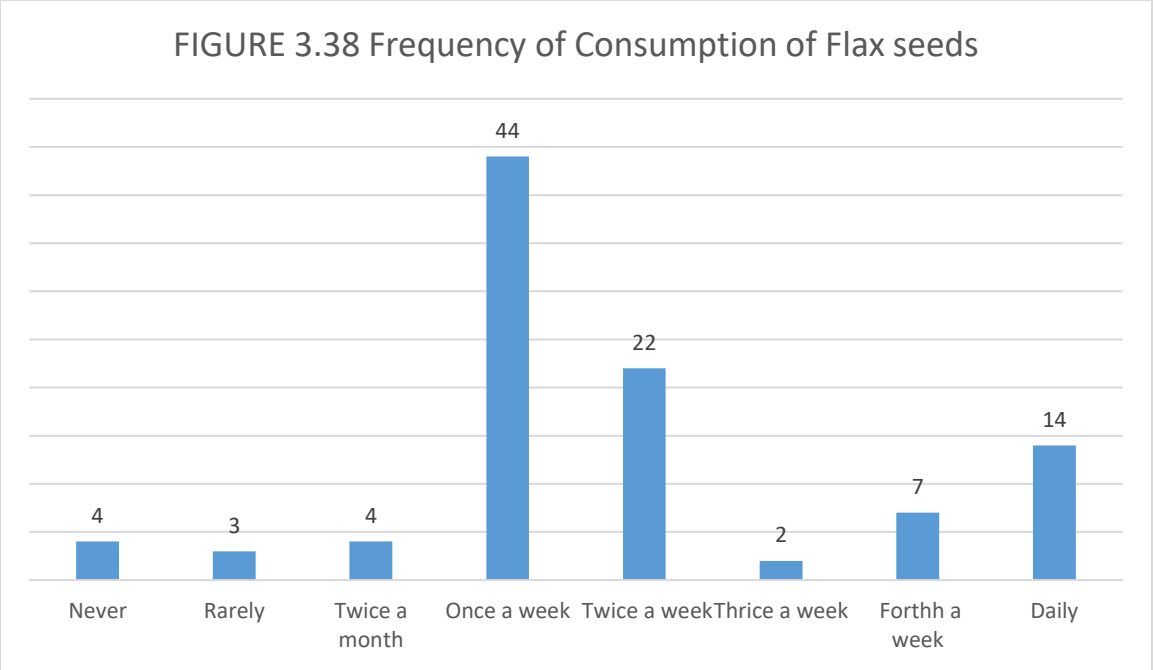


The table displays the frequency distribution of participants consuming sesame seeds, measured in quantity/gm or ml, in the study, with a total of 100 respondents. The majority, 54%, consume 15 gm or ml of sesame seeds. Participants consuming 10 gm or ml make up 39% of the sample. Those consuming 5 gm or ml constitute 3% of the sample, while 1% consume 20 gm or ml. The valid percent column confirms these percentages, and the cumulative percent column shows the progressive accumulation of each category, reaching 100% when combined. This distribution indicates that 15 gm or ml is the most commonly consumed quantity among the participants.

TABLE 3.38 Frequency of Consumption of Flax seeds

Valid	Frequency	Percent	Valid Percent	Cumulative Percent
Never	4	4.0	4.0	4.0
Rarely	3	3.0	3.0	3.0
Twice a month	4	4.0	4.0	11.0
Once a week	44	44.0	44.0	55.0

Twice a week	22	22.0	22.0	73.0
Thrice a week	2	2.0	2.0	79.0
Fourth a week	7	3.0	3.0	86.0
Daily	14	14.0	14.0	100.0
Total	100	100.0	100.0	



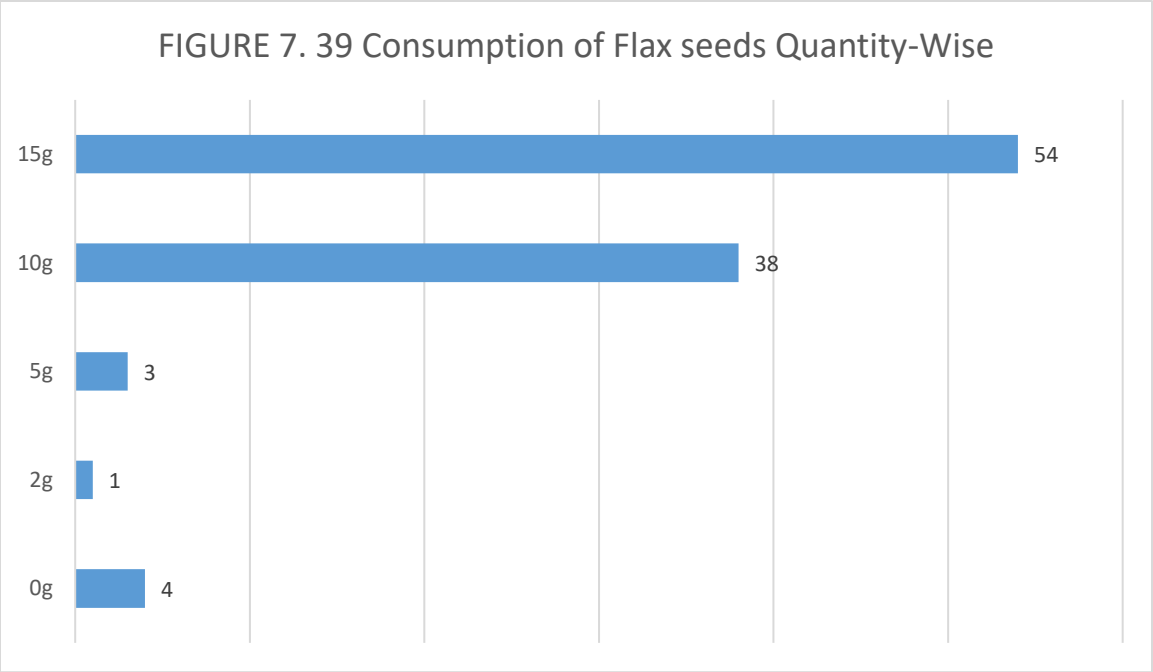
The table presents the frequency distribution of participants consuming flax seeds, categorized by frequency of consumption, in the study, with a total of 100 respondents. The largest group, 44%, consumes flax seeds once a week. Participants who consume them daily constitute 14% of the sample, while 22% consume them twice a week. Those who never consume flax seeds make up 4% of the sample, and 7% consume them four times a week. Smaller percentages include 3% consuming them rarely, 4% twice a month, and 2% thrice a week. The valid percent column matches these percentages, and the cumulative percent column shows the progressive addition of each category, reaching 100% when combined. This distribution indicates that consuming flax seeds once a week is the most common frequency among the participants.

TABLE 3.39 Consumption of Flax seeds Quantity-Wise

Valid	Frequency	Percent	Valid Percent	Cumulative Percent
0g	4	4.0	4.0	4.0
2g	1	1.0	1.0	5.0
5g	3	3.0	3.0	8.0

10g	38	38.0	38.0	46.0
15g	54	54.0	54.0	100.0
Total	100	100.0	100.0	

FIGURE 3.39 Consumption of Flax seeds Quantity-Wise

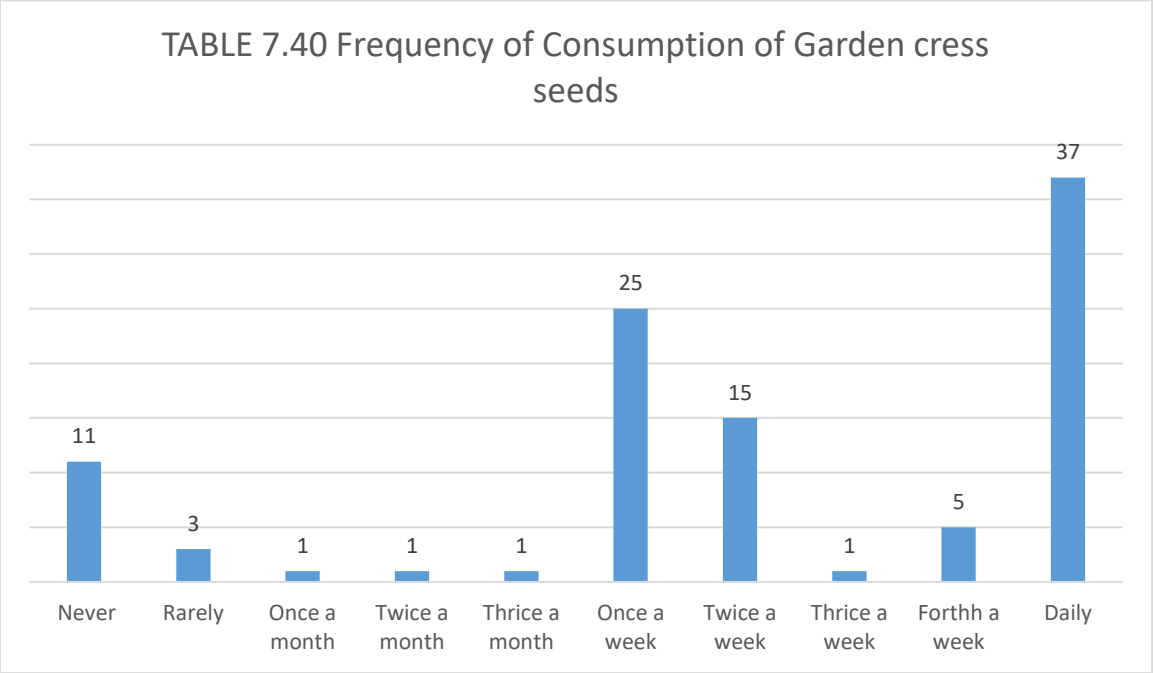


The table displays the frequency distribution of participants consuming flax seeds, measured in quantity/gm or ml, in the study, with a total of 100 respondents. The majority, 54%, consume 15 gm or ml of flax seeds. Participants consuming 10 gm or ml make up 38% of the sample. Those consuming 5 gm or ml constitute 3% of the sample, while 4% consume 0 gm or ml, and 1% consume 2 gm or ml. The valid percent column confirms these percentages, and the cumulative percent column shows the progressive accumulation of each category, reaching 100% when combined. This distribution indicates that 15 gm or ml is the most commonly consumed quantity among the participants.

TABLE 3.40 Frequency of Consumption of Garden cress seeds

Valid	Frequency	Percent	Valid Percent	Cumulative Percent
Never	11	11.0	11.0	11.0
Rarely	3	3.0	3.0	14.0
Once a month	1	1.0	1.0	15.0
Twice a month	1	1.0	1.0	16.0
Thrice a month	1	1.0	1.0	13.0
Once a week	25	25.0	25.0	42.0

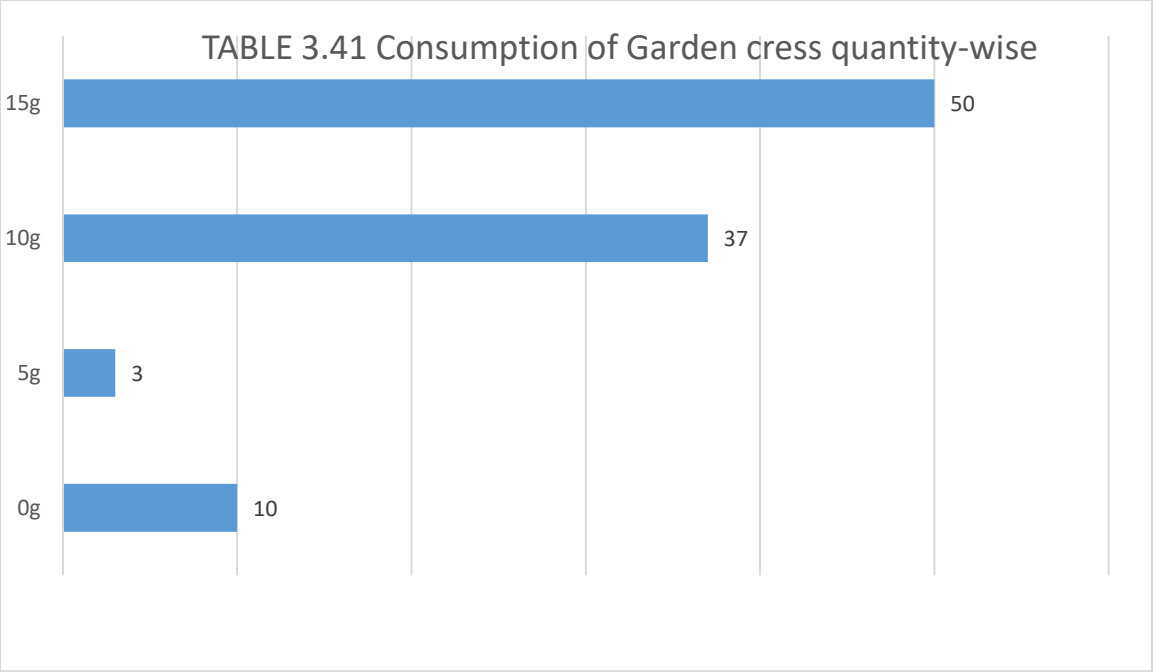
Twice a week	15	15.0	15.0	53.0
Thrice a week	1	1.0	1.0	58.0
Fourth a week	5	5.0	5.0	63.0
Daily	37	33.0	33.0	100.0
Total	100	100.0	100.0	



The table presents the frequency distribution of participants consuming garden cress seeds, categorized by frequency of consumption, in the study, with a total of 100 respondents. The largest group, 37%, consumes garden cress seeds daily. Participants who consume them once a week constitute 25% of the sample, while 15% consume them twice a week. Those who never consume garden cress seeds make up 11% of the sample, and 5% consume them four times a week. Smaller percentages include 3% consuming them rarely, and 1% each for once a month, twice a month, thrice a month, and thrice a week. The valid percent column matches these percentages, and the cumulative percent column shows the progressive addition of each category, reaching 100% when combined. This distribution indicates that consuming garden cress seeds daily is the most common frequency among the participant

TABLE 3.41 Consumption of Garden cress quantity-wise

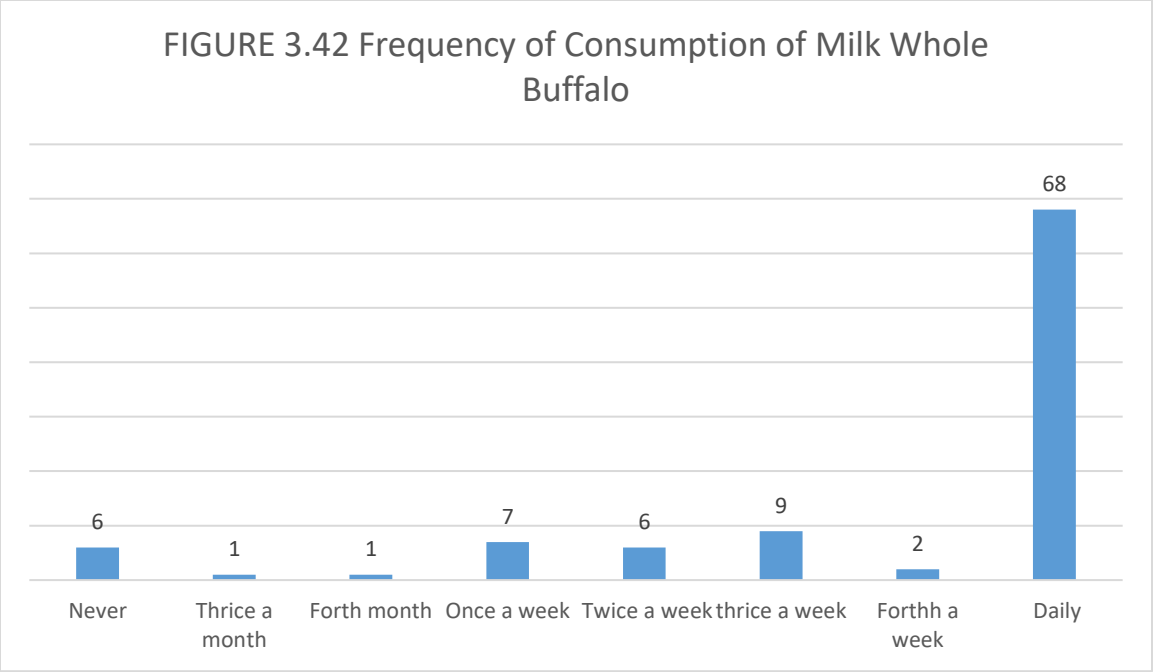
Valid	Frequency	Percent	Valid Percent	Cumulative Percent
0g	10	10.0	10.0	10.0
5g	3	3.0	3.0	13.0
10g	37	33.0	33.0	50.0
15g	50	50.0	50.0	100.0
Total	100	100.0	100.0	



The table displays the frequency distribution of participants consuming garden cress seeds, measured in quantity/gm or ml, in the study, with a total of 100 respondents. The majority, 50%, consume 15 gm or ml of garden cress seeds. Participants consuming 10 gm or ml make up 37% of the sample. Those consuming 0 gm or ml constitute 10% of the sample, while 3% consume 5 gm or ml. The valid percent column confirms these percentages, and the cumulative percent column shows the progressive accumulation of each category, reaching 100% when combined. This distribution indicates that 15 gm or ml is the most commonly consumed quantity among the participants.

TABLE 3. 42 Frequency of Consumption of Milk Whole Buffalo

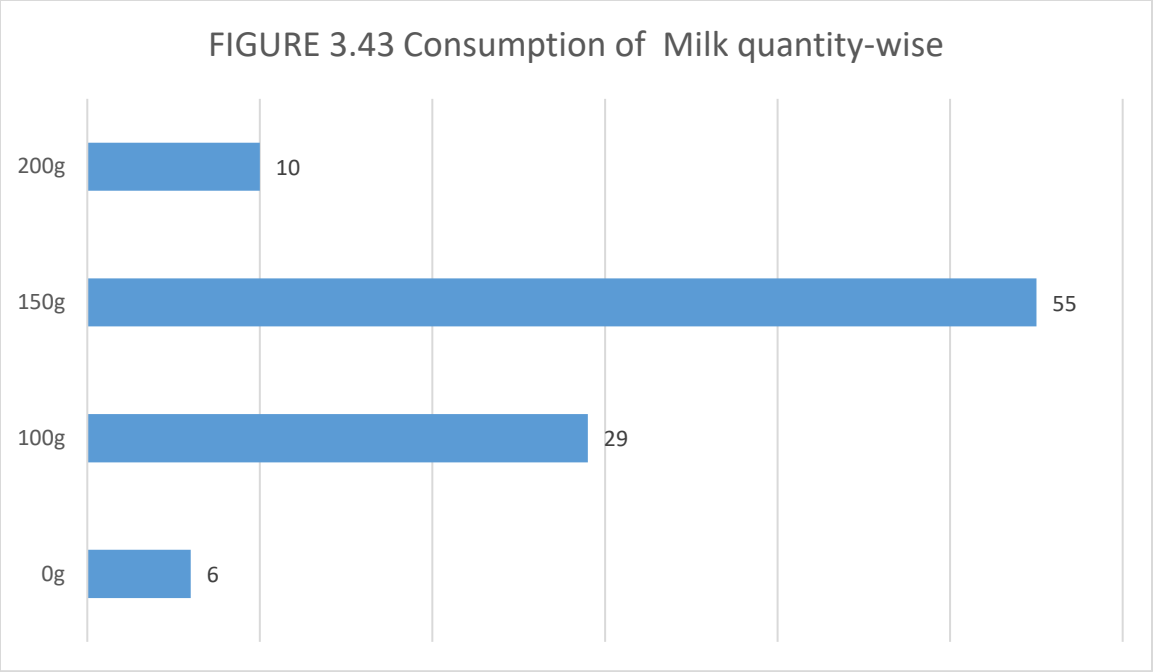
Valid	Frequency	Percent	Valid Percent	Cumulative Percent
Never	6	6.0	6.0	6.0
Thrice a month	1	1.0	1.0	3.0
Forth month	1	1.0	1.0	8.0
Once a week	7	3.0	3.0	15.0
Twice a week	6	6.0	6.0	21.0
thrice a week	9	9.0	9.0	30.0
Fourth a week	2	2.0	2.0	32.0
Daily	68	68.0	68.0	100.0
Total	100	100.0	100.0	



The table presents the frequency distribution of participants consuming whole buffalo milk in the study, with a total of 100 respondents. The majority, 68%, consume it daily. Those who consume it thrice a week constitute 9% of the sample, while 7% consume it once a week and 6% consume it twice a week. Participants who never consume whole buffalo milk make up 6% of the sample, and 2% consume it four times a week. Smaller percentages include 1% each for consuming it thrice or four times a month. The valid percent column matches these percentages, and the cumulative percent column shows the progressive addition of each category, reaching 100% when combined. This distribution indicates that daily consumption of whole buffalo milk is the most common frequency among the participants.

TABLE 3.43 Consumption of Milk quantity-wise

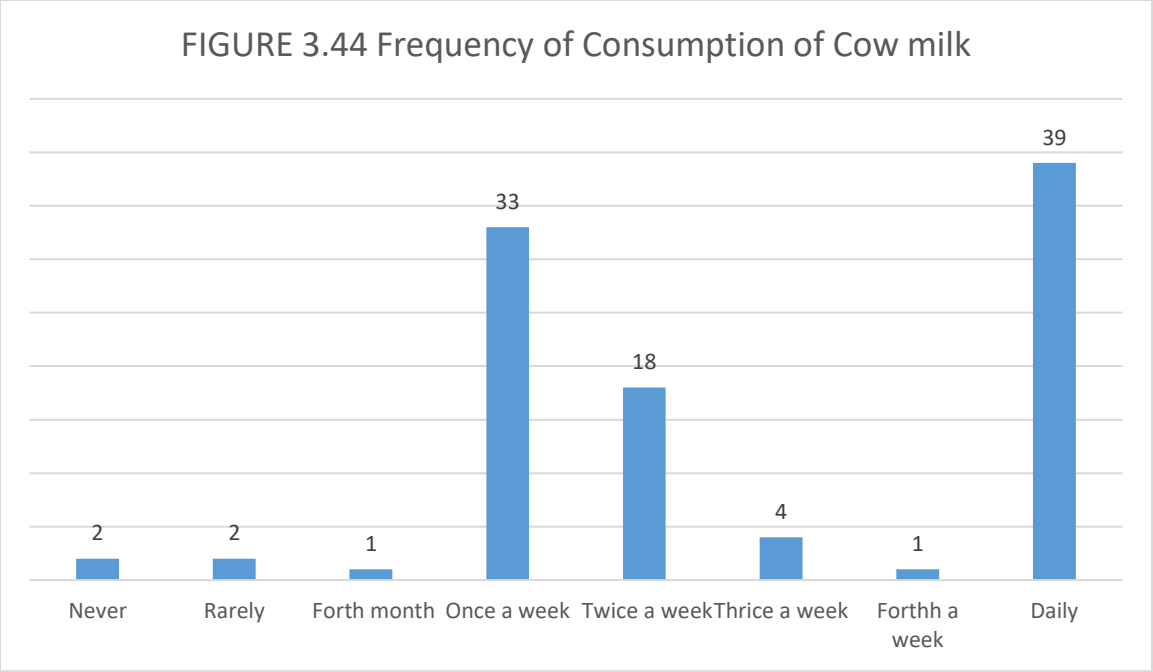
Valid	Frequency	Percent	Valid Percent	Cumulative Percent
0g	6	6.0	6.0	6.0
100g	29	29.0	29.0	35.0
150g	55	55.0	55.0	90.0
200g	10	10.0	10.0	100.0
Total	100	100.0	100.0	



The table presents the frequency distribution of participants consuming buffalo milk in the study, categorized by the quantity consumed in g or milliliters. Out of 100 respondents, 6% reported consuming no buffalo milk. The most common quantity consumed is 150 gm/ml, representing 55% of the sample. Following this, 29% reported consuming 100 gm/ml, while 10% reported consuming 200 gm/ml. The valid percent column corresponds to these percentages, and the cumulative percent column shows the progressive addition of each category, reaching 100% when combined. This distribution reveals that the majority of participants consume buffalo milk in the quantity of 150 gm/ml.

TABLE 3. 44 Frequency of Consumption of Cow milk

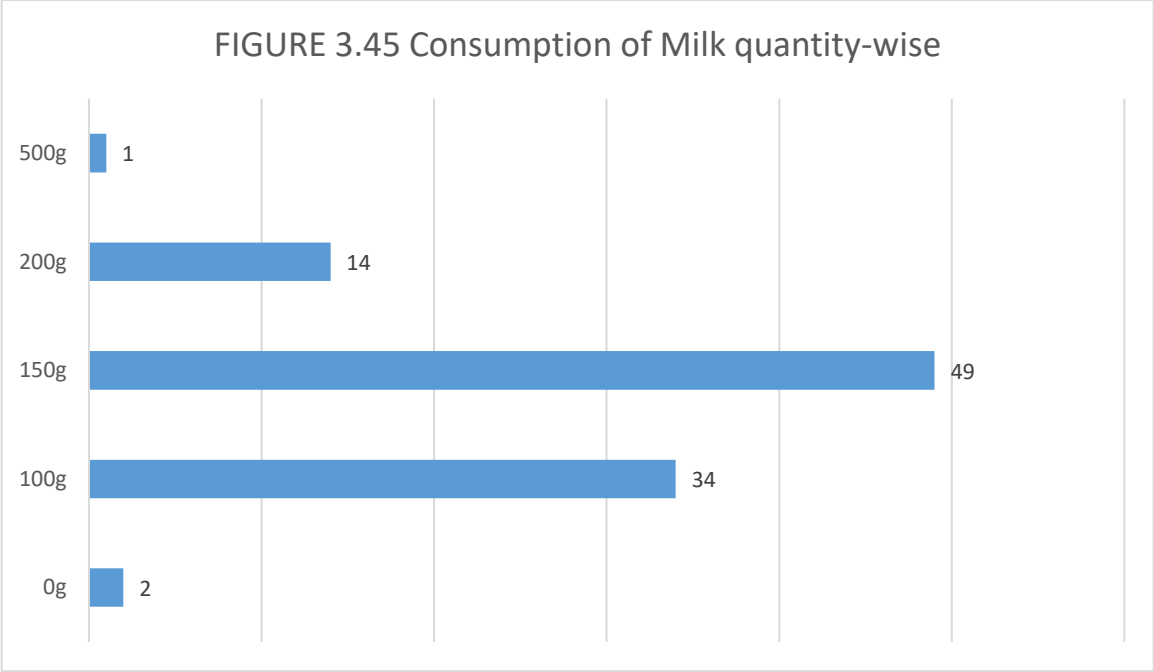
Valid	Frequency	Percent	Valid Percent	Cumulative Percent
Never	2	2.0	2.0	2.0
Rarely	2	2.0	2.0	4.0
Forth month	1	1.0	1.0	5.0
Once a week	33	33.0	33.0	38.0
Twice a week	18	18.0	18.0	56.0
Thrice a week	4	4.0	4.0	60.0
Fourth a week	1	1.0	1.0	61.0
Daily	39	39.0	39.0	100.0
Total	100	100.0	100.0	



The table displays the frequency distribution of participants consuming whole cow milk, categorized by the frequency of consumption. Out of 100 respondents, 2% reported never consuming cow milk, while another 2% reported consuming it rarely. Additionally, 39% reported consuming cow milk daily, making it the most common frequency of consumption. The valid percent column reflects these percentages, while the cumulative percent column shows the progressive addition of each category, reaching 100% when combined.

TABLE 3.45 Consumption of Milk quantity-wise

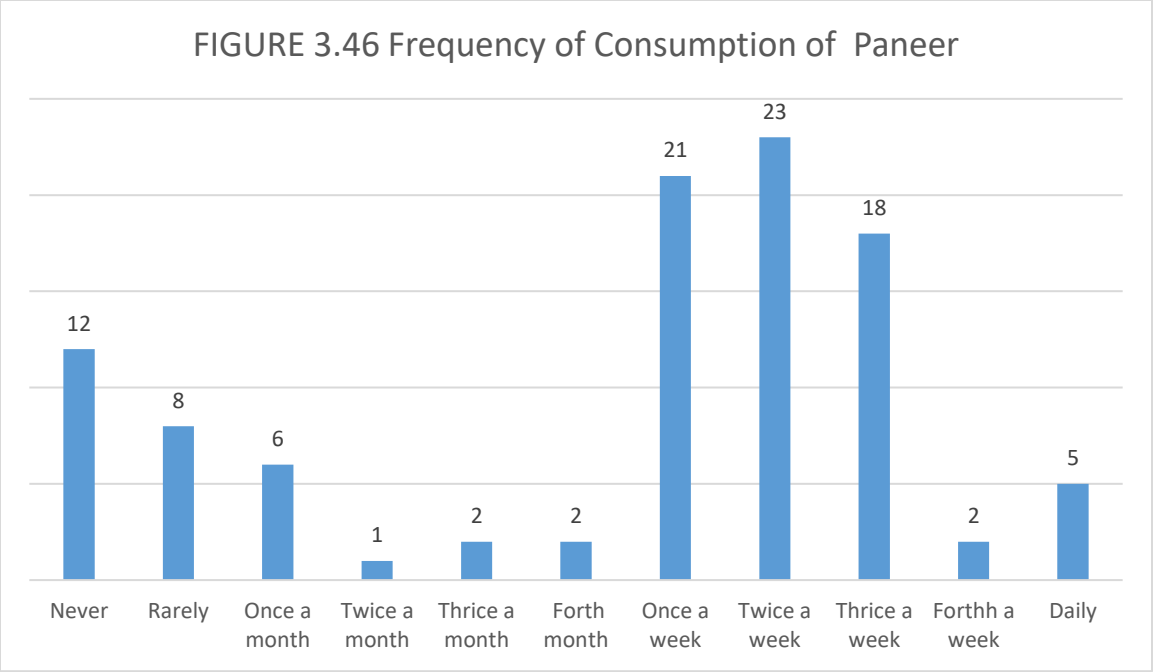
Valid	Frequency	Percent	Valid Percent	Cumulative Percent
0g	2	2.0	2.0	2.0
100g	34	34.0	34.0	36.0
150g	49	49.0	49.0	85.0
200g	14	14.0	14.0	99.0
500g	1	1.0	1.0	100.0
Total	100	100.0	100.0	



The table displays the frequency distribution of the quantity of whole cow milk consumed by participants, categorized by the quantity in g or milliliters (gm/ml). Out of 100 respondents, 2% reported consuming 0 gm/ml, while 34% reported consuming 100 gm/ml. Moreover, 49% reported consuming 150 gm/ml, and 14% reported consuming 200 gm/ml. Only 1 respondent reported consuming 500 gm/ml. The valid percent column reflects these percentages, while the cumulative percent column shows the progressive addition of each category, reaching 100% when combined.

TABLE 3.46 Frequency of Consumption of Paneer

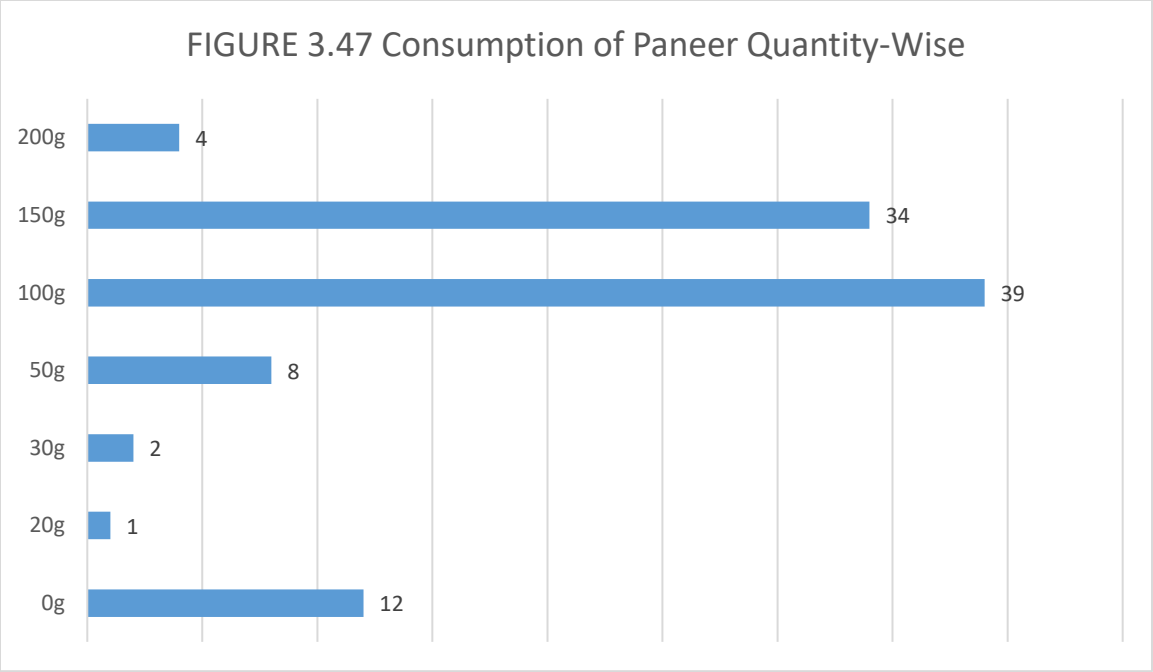
Valid	Frequency	Percent	Valid Percent	Cumulative Percent
Never	12	12.0	12.0	12.0
Rarely	8	8.0	8.0	20.0
Once a month	6	6.0	6.0	26.0
Twice a month	1	1.0	1.0	23.0
Thrice a month	2	2.0	2.0	29.0
Forth month	2	2.0	2.0	31.0
Once a week	21	21.0	21.0	52.0
Twice a week	23	23.0	23.0	75.0
Thrice a week	18	18.0	18.0	93.0
Fourth a week	2	2.0	2.0	95.0
Daily	5	5.0	5.0	100.0
Total	100	100.0	100.0	



The table displays the frequency distribution of the consumption of paneer among participants. Out of 100 respondents, 12% reported never consuming paneer, while 8% reported consuming it rarely. Additionally, 6% reported consuming it once a month, and only 1% reported consuming it twice a month. Furthermore, 21% reported consuming paneer once a week, and 23% reported consuming it twice a week. Moreover, 18% reported consuming it thrice a week, and 2% reported consuming it four times a week. Finally, 5% reported consuming paneer daily.

TABLE 3.47 Consumption of Paneer Quantity-Wise

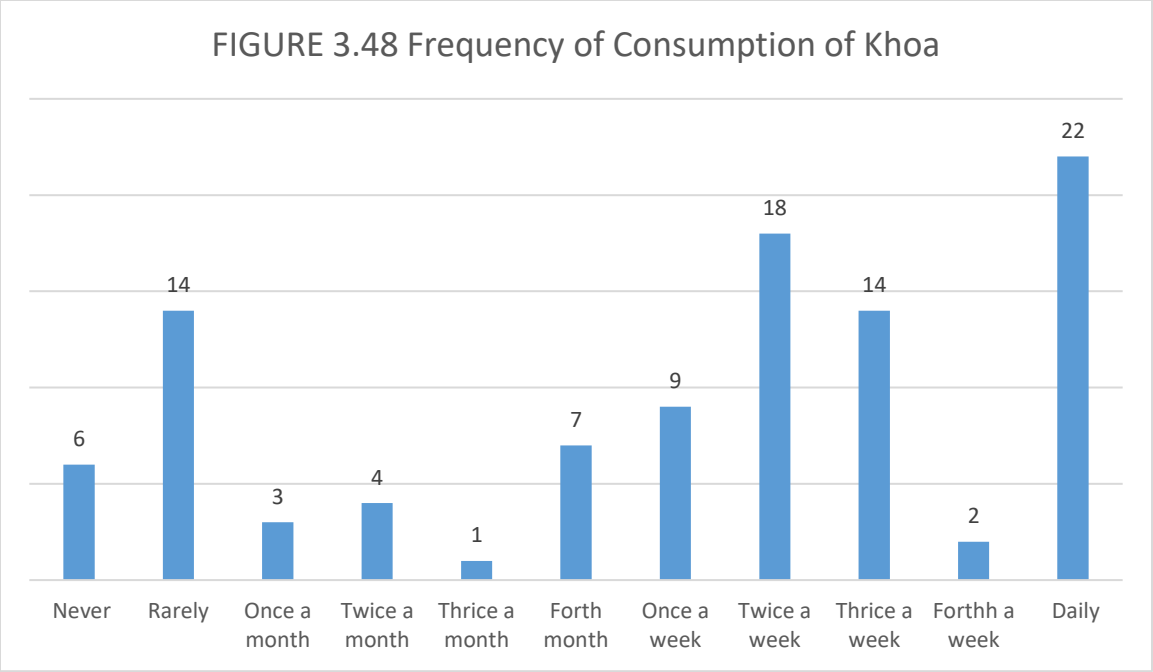
Valid	Frequency	Percent	Valid Percent	Cumulative Percent
0g	12	12.0	12.0	12.0
20g	1	1.0	1.0	13.0
30g	2	2.0	2.0	15.0
50g	8	8.0	8.0	23.0
100g	39	39.0	39.0	62.0
150g	34	34.0	34.0	96.0
200g	4	4.0	4.0	100.0
Total	100	100.0	100.0	



The table shows the distribution of paneer consumption in g and ml. Among respondents, 12% consumed 0 g/ml, 1% consumed 20 g/ml, 2% consumed 30 g/ml, 8% consumed 50 g/ml, 39% consumed 100 g/ml, 34% consumed 150 g/ml, and 4% consumed 200 g/ml.

TABLE 3.48 Frequency of Consumption of Khoa

Valid	Frequency	Percent	Valid Percent	Cumulative Percent
Never	6	6.0	6.0	6.0
Rarely	14	14.0	14.0	20.0
Once a month	3	3.0	3.0	23.0
Twice a month	4	4.0	4.0	23.0
Thrice a month	1	1.0	1.0	28.0
Forth month	7	3.0	3.0	35.0
Once a week	9	9.0	9.0	44.0
Twice a week	18	18.0	18.0	62.0
Thrice a week	14	14.0	14.0	76.0
Fourth a week	2	2.0	2.0	78.0
Daily	22	22.0	22.0	100.0
Total	100	100.0	100.0	

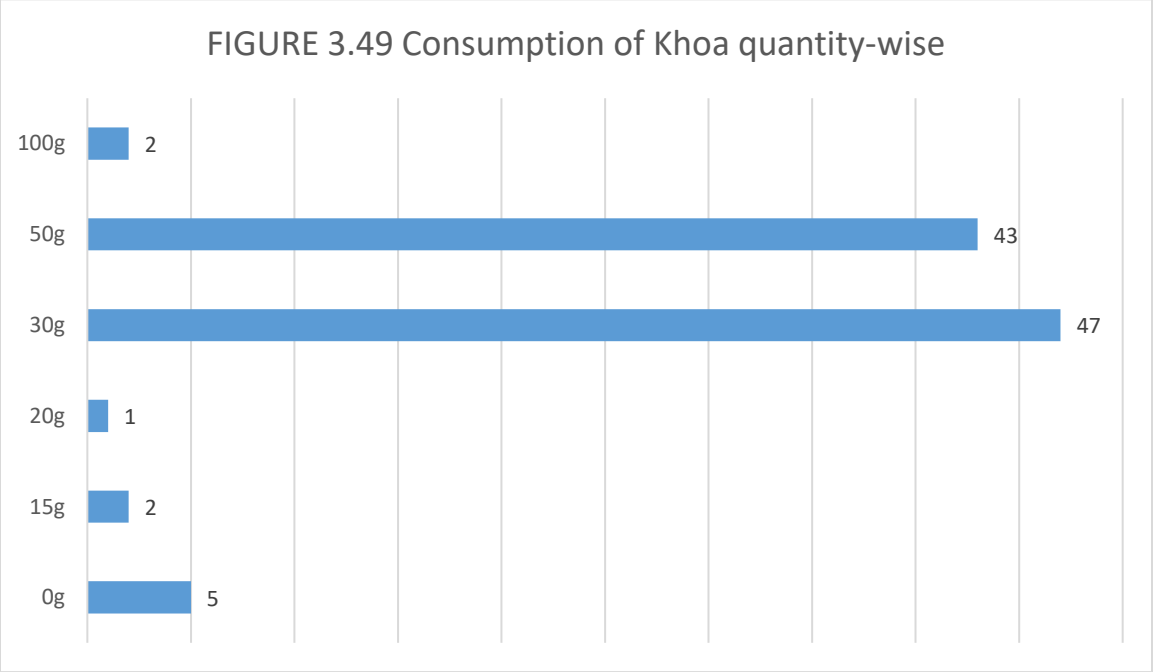


This table presents the frequency of consumption of Khoa among participants in a dietary survey. The data shows that Khoa is consumed with varying frequency among respondents. The majority of respondents (22%) reported consuming Khoa daily, while 18% reported consuming it twice a week. Additionally, 14% reported consuming it thrice a week, and another 9% reported consuming it once a week. Smaller percentages reported consuming it with less frequency, such as 7% who consumed it once a month or four times a month, and 6% who consumed it rarely. Rare consumption was reported by 6% of respondents, while 2% reported never consuming Khoa. Overall, the data suggests that Khoa is consumed regularly by a significant portion of the surveyed population, with daily consumption being the most common.

TABLE 3.49 Consumption of Khoa quantity-wise

Valid	Frequency	Percent	Valid Percent	Cumulative Percent
0g	5	5.0	5.0	5.0
15g	2	2.0	2.0	3.0
20g	1	1.0	1.0	8.0
30g	47	43.0	43.0	55.0
50g	43	43.0	43.0	98.0
100g	2	2.0	2.0	100.0

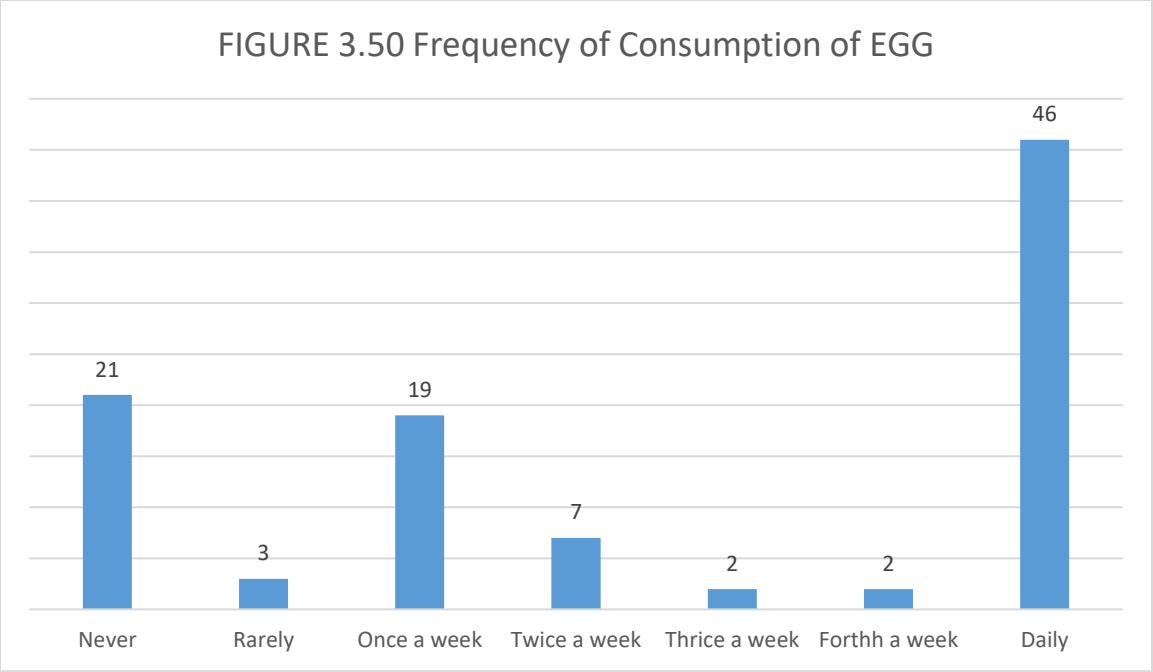
Total	100	100.0	100.0	



This table presents the quantity of Khoa consumed, measured in g, as reported by participants in a dietary survey. The data indicates that 47% of respondents reported consuming 30 g of Khoa, while 43% reported consuming 50 g. Smaller percentages reported consuming different quantities, such as 5% consuming 0 g, 2% consuming 15 g or 100 g, and 1% consuming 20 g. Overall, the data suggests that 30 and 50 g are the most common quantities consumed.

TABLE 3.50 Frequency of Consumption of EGG

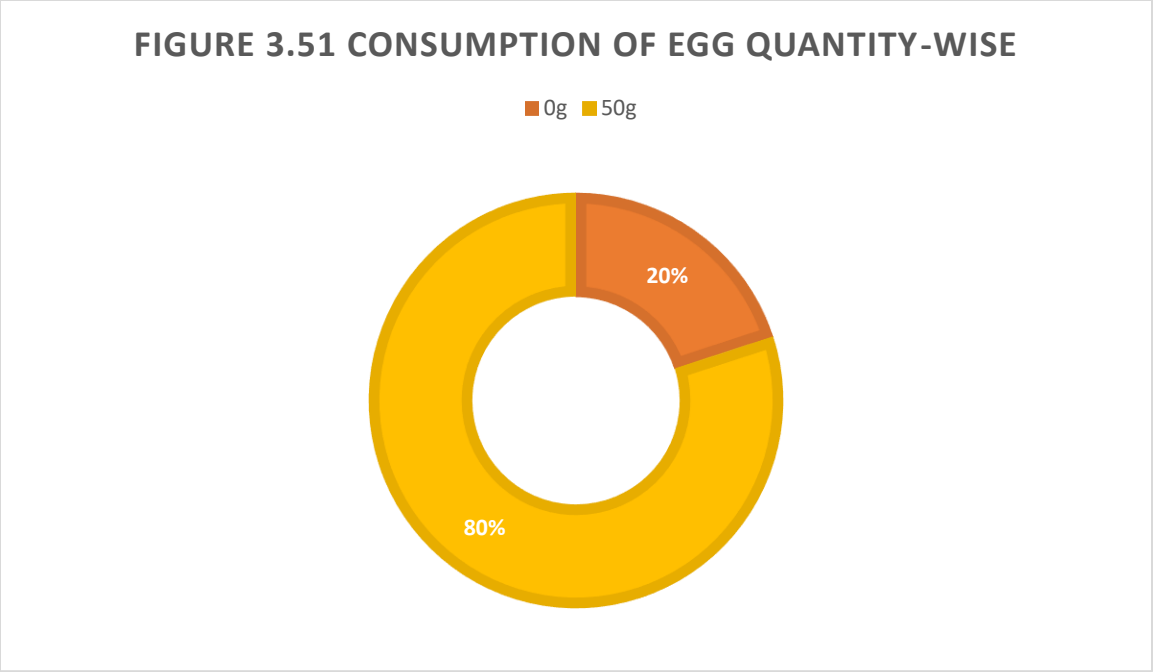
Valid	Frequency	Percent	Valid Percent	Cumulative Percent
Never	21	21.0	21.0	21.0
Rarely	3	3.0	3.0	24.0
Once a week	19	19.0	19.0	43.0
Twice a week	7	3.0	3.0	50.0
Thrice a week	2	2.0	2.0	52.0
Fourth a week	2	2.0	2.0	54.0
Daily	46	46.0	46.0	100.0
Total	100	100.0	100.0	



This table presents the frequency of egg consumption among participants in a poultry-related research study. The majority of respondents (46%) reported consuming eggs daily, while 21% indicated they never consumed eggs. Among those who did consume eggs, 19% reported doing so once a week, contributing to 43% of the sample consuming eggs at least weekly. Only a small percentage reported consuming eggs more than once a week, with 7% doing so twice a week, 2% thrice a week, and another 2% four times a week. Only 3% reported rare consumption of eggs. Overall, the data suggests that eggs are a commonly consumed item, with a significant portion of the sample consuming them on a daily basis.

TABLE 3.51 Consumption of Egg quantity-wise

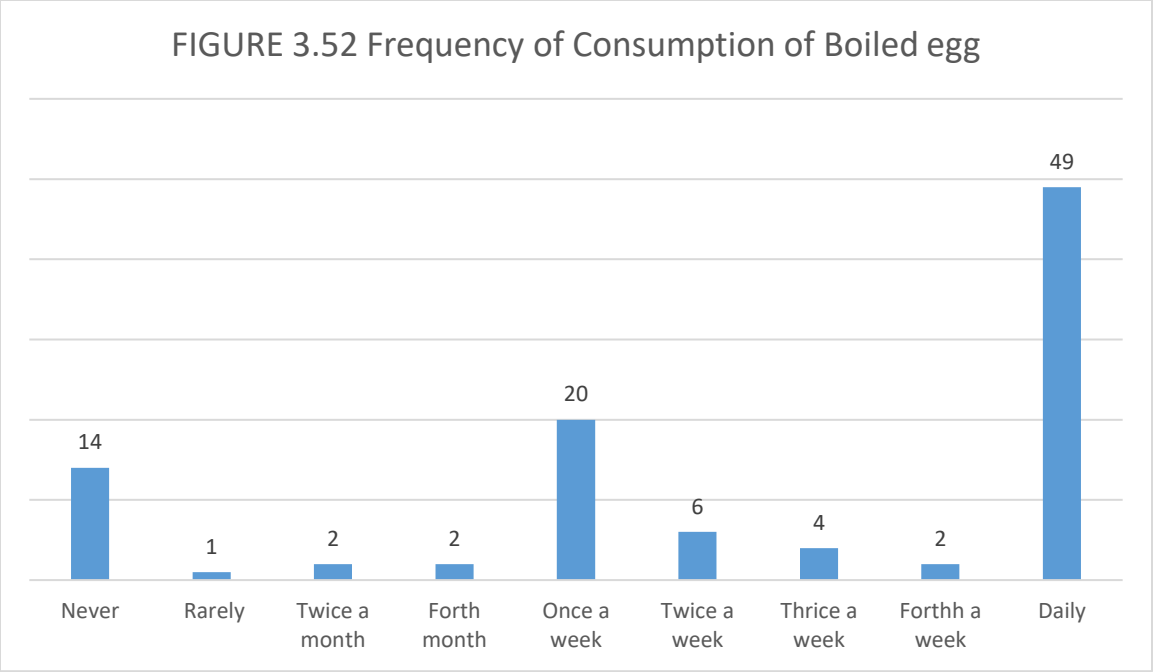
Valid	Frequency	Percent	Valid Percent	Cumulative Percent
0g	20	20.0	20.0	20.0
50g	80	80.0	80.0	100.0
Total	100	100.0	100.0	



This table presents the quantity of whole egg poultry consumed, measured in g or ml, as reported by participants in a dietary survey. The data shows that 80% of respondents reported consuming 50 g or ml of whole egg poultry, while 20% reported not consuming any.

TABLE 3.52 Frequency of Consumption of Boiled egg

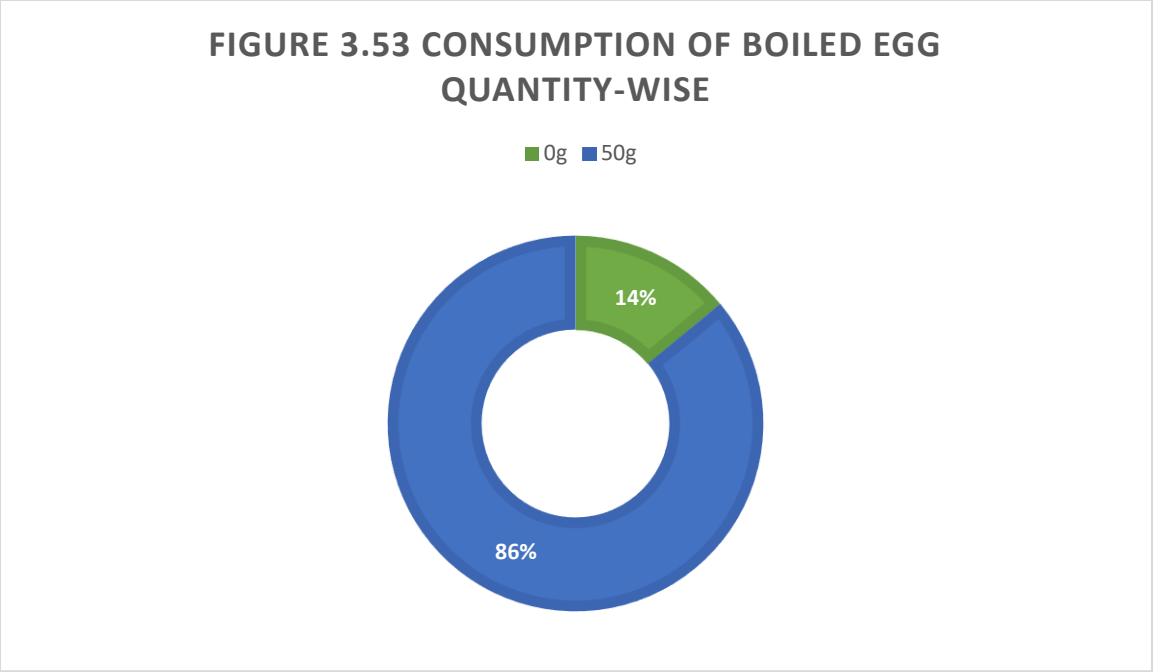
Valid	Frequency	Percent	Valid Percent	Cumulative Percent
Never	14	14.0	14.0	14.0
Rarely	1	1.0	1.0	15.0
Twice a month	2	2.0	2.0	13.0
Forth month	2	2.0	2.0	19.0
Once a week	20	20.0	20.0	39.0
Twice a week	6	6.0	6.0	45.0
Thrice a week	4	4.0	4.0	49.0
Fourth a week	2	2.0	2.0	51.0
Daily	49	49.0	49.0	100.0
Total	100	100.0	100.0	



This table presents the frequency of consumption of boiled whole egg poultry among participants in a dietary survey. Among respondents, the majority (49%) reported consuming boiled whole egg poultry on a daily basis, while 20% reported consuming it once a week. Smaller percentages reported consuming it with less frequency, such as 14% who never consumed it, 6% who consumed it twice a week, and 4% who consumed it thrice a week. Only a few respondents reported consuming boiled whole egg poultry on a less regular basis, such as rare consumption (1%), twice a month (2%), or once every four months (2%). Overall, the data suggests that boiled whole egg poultry is a commonly consumed item, with a significant portion of the sample consuming it daily.

TABLE 3.53 Consumption of Boiled egg quantity-wise

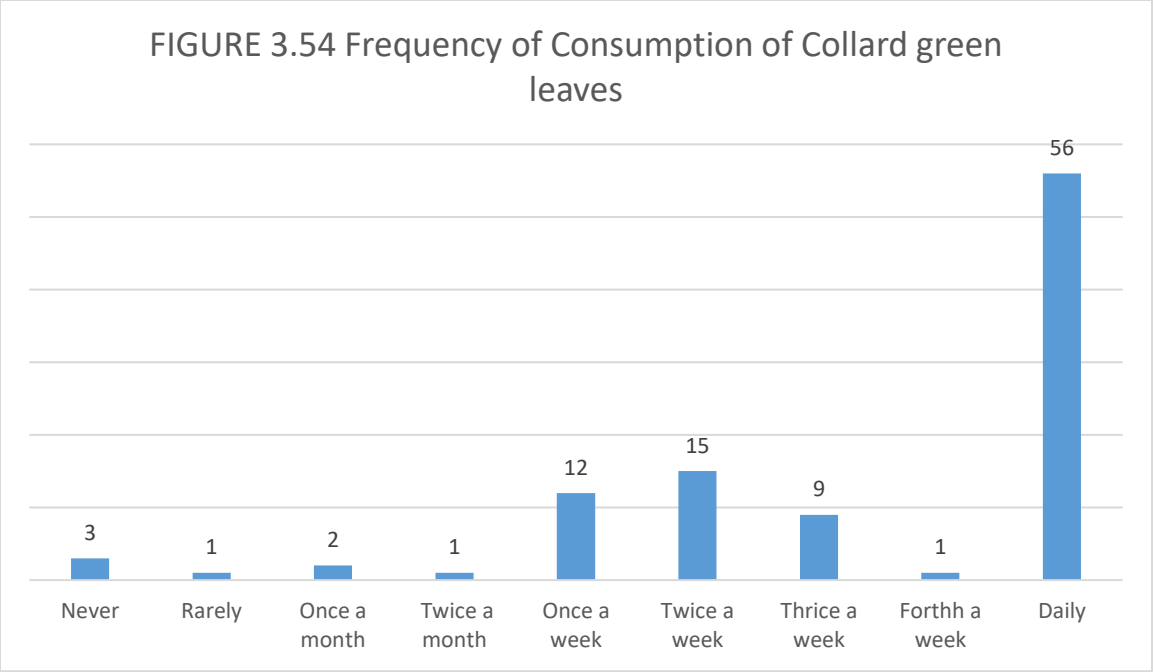
Valid	Frequency	Percent	Valid Percent	Cumulative Percent
0g	14	14.0	14.0	14.0
50g	86	86.0	86.0	100.0
Total	100	100.0	100.0	



This table presents the quantity of boiled whole egg poultry consumed, measured in g or ml, as reported by participants in a dietary survey. The data indicates that 86% of respondents reported consuming 50 g or ml of boiled whole egg poultry, while 14% reported not consuming any.

TABLE 3.54 Frequency of Consumption of Collard green leaves

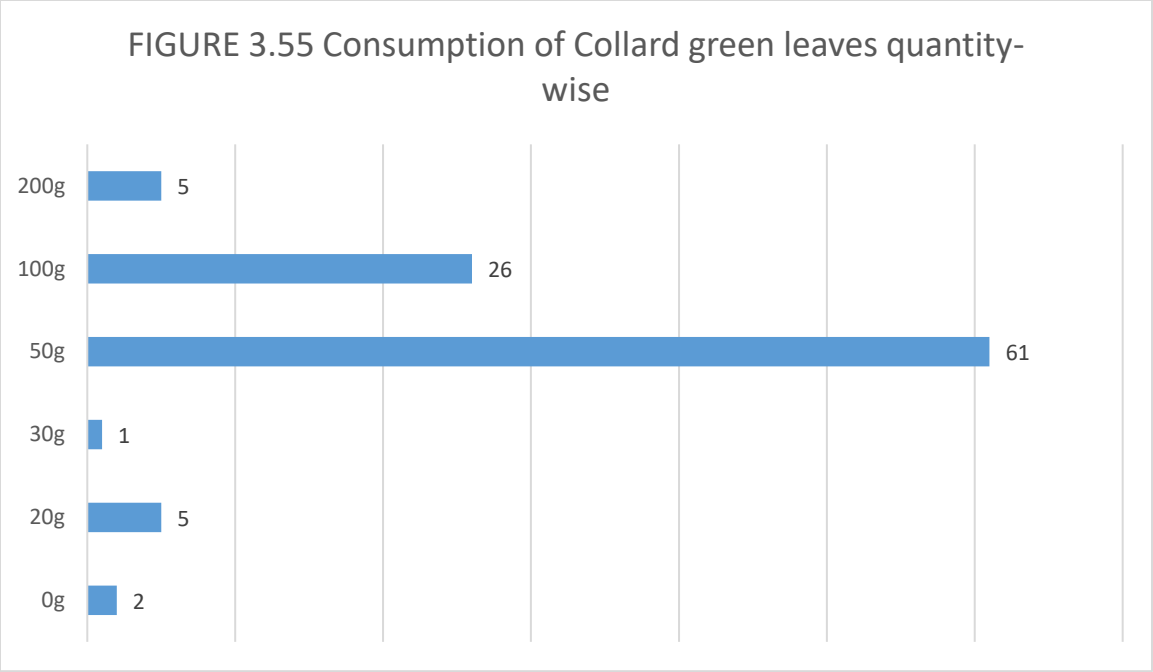
Valid	Frequency	Percent	Valid Percent	Cumulative Percent
Never	3	3.0	3.0	3.0
Rarely	1	1.0	1.0	4.0
Once a month	2	2.0	2.0	6.0
Twice a month	1	1.0	1.0	3.0
Once a week	12	12.0	12.0	19.0
Twice a week	15	15.0	15.0	34.0
Thrice a week	9	9.0	9.0	43.0
Fourth a week	1	1.0	1.0	44.0
Daily	56	56.0	56.0	100.0
Total	100	100.0	100.0	



This table displays the frequency of consumption of cabbage, collard greens, or similar vegetables among participants in a dietary survey. The majority of respondents (56%) reported consuming these vegetables on a daily basis while 12% reported consuming them once a week and 15% reported consuming them twice a week. Smaller percentages reported consuming them with less frequency, such as 9% who consumed them thrice a week, 3% who consumed them once a month, and 1% who consumed them twice a month or four times a week. Only a few respondents reported rarely consuming these vegetables (1%), and an even smaller percentage reported never consuming them (3%).

TABLE 3.55 Consumption of Collard green leaves quantity-wise

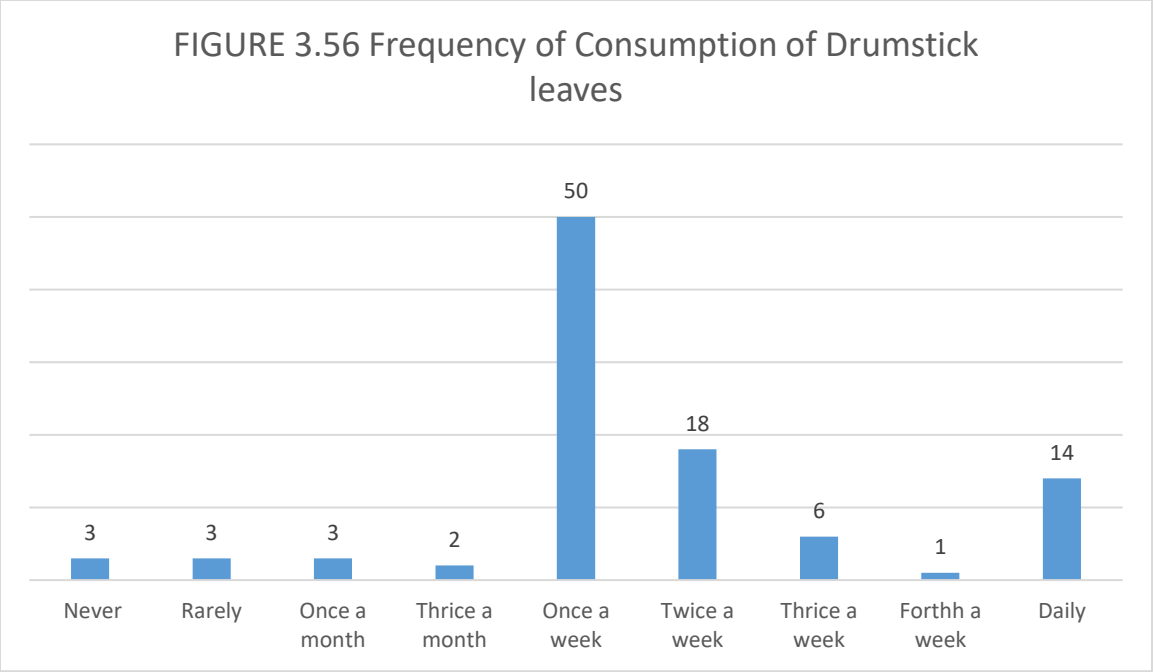
Valid	Frequency	Percent	Valid Percent	Cumulative Percent
0g	2	2.0	2.0	2.0
20g	5	5.0	5.0	3.0
30g	1	1.0	1.0	8.0
50g	61	61.0	61.0	69.0
100g	26	26.0	26.0	95.0
200g	5	5.0	5.0	100.0
Total	100	100.0	100.0	



This table presents the quantity of cabbage, collard greens, or similar vegetables consumed, measured in g or ml, as reported by participants in a dietary survey. The data shows that 61% of respondents reported consuming 50 g or ml of these vegetables, while 26% reported consuming 100 g or ml. Smaller percentages reported consuming different quantities, such as 5% consuming 20 g or ml, another 5% consuming 200 g or ml, and 1% consuming 30 g or ml. Only 2% reported not consuming any of these vegetables. Overall, the data suggests a variety in the quantities consumed, with a significant portion of the sample consuming 50 or 100 g or ml.

TABLE 3.56 Frequency of Consumption of Drumstick leaves

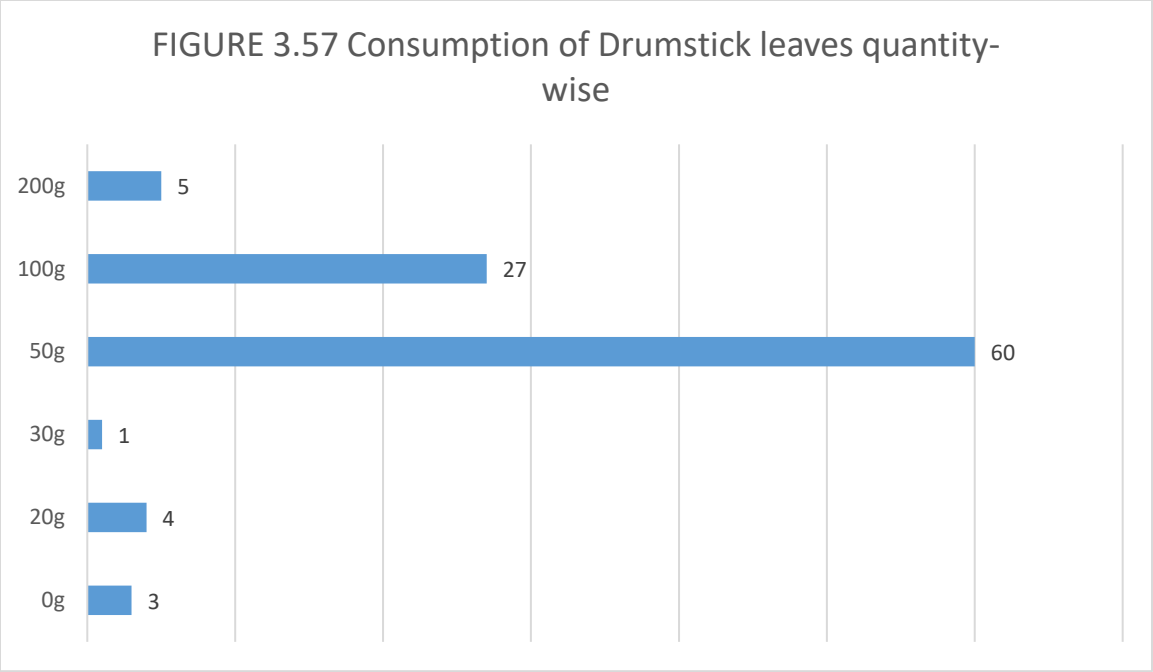
Valid	Frequency	Percent	Valid Percent	Cumulative Percent
Never	3	3.0	3.0	3.0
Rarely	3	3.0	3.0	6.0
Once a month	3	3.0	3.0	9.0
Thrice a month	2	2.0	2.0	11.0
Once a week	50	50.0	50.0	61.0
Twice a week	18	18.0	18.0	79.0
Thrice a week	6	6.0	6.0	85.0
Fourth a week	1	1.0	1.0	86.0
Daily	14	14.0	14.0	100.0
Total	100	100.0	100.0	



This table presents the frequency of consumption of drumstick leaves among participants in a dietary survey. The majority of respondents (50%) reported consuming drumstick leaves once a week, while 18% reported consuming them twice a week. Smaller percentages reported consuming them with less frequency, such as 6% who consumed them thrice a week, 3% who consumed them once a month, and 2% who consumed them thrice a month. Additionally, 14% reported consuming drumstick leaves daily. Rare consumption was reported by 3% of respondents, while another 3% reported never consuming drumstick leaves. Overall, the data indicates that drumstick leaves are commonly consumed, with a significant portion of the sample consuming them on a weekly basis.

TABLE 3.57 Consumption of Drumstick leaves quantity-wise

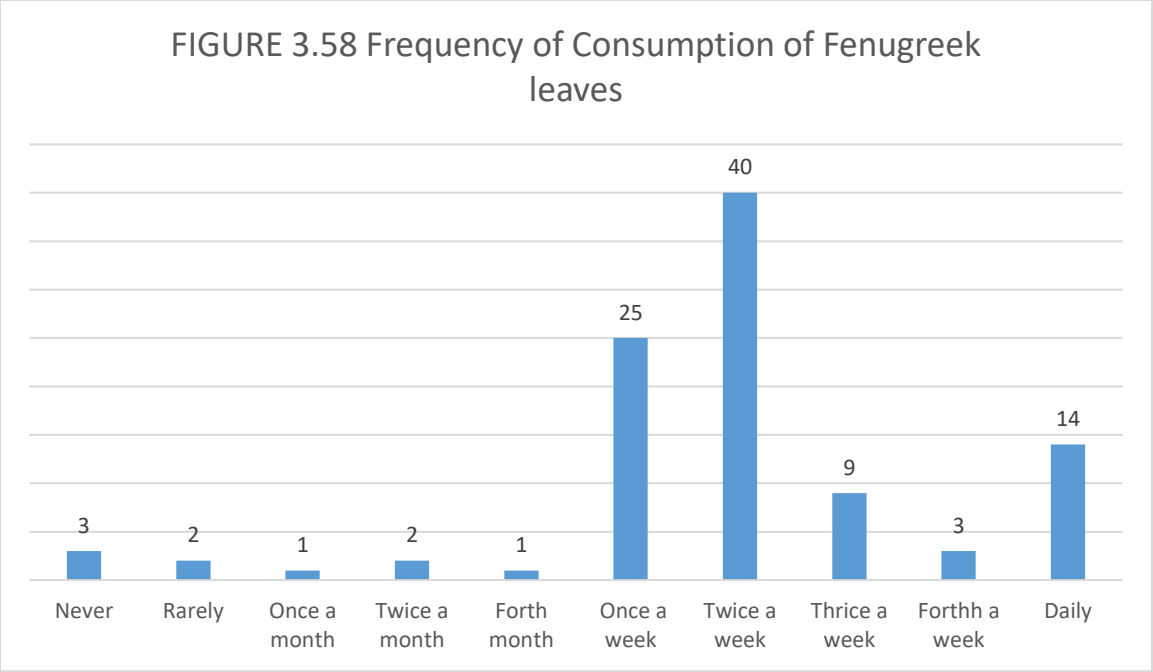
Valid	Frequency	Percent	Valid Percent	Cumulative Percent
0g	3	3.0	3.0	3.0
20g	4	4.0	4.0	3.0
30g	1	1.0	1.0	8.0
50g	60	60.0	60.0	68.0
100g	27	23.0	23.0	95.0
200g	5	5.0	5.0	100.0
Total	100	100.0	100.0	



This table presents the quantity of drumstick leaves consumed, measured in g or ml, as reported by participants in a dietary survey. The data indicates that 60% of respondents reported consuming 50 g or ml of drumstick leaves, while 27% reported consuming 100 g or ml. Smaller percentages reported consuming different quantities, such as 4% consuming 20 g or ml, another 4% consuming 200 g or ml, and 1% consuming 30 g or ml. Only 3% reported not consuming any drumstick leaves. Overall, the data suggests a variety in the quantities consumed, with a significant portion of the sample consuming 50 or 100 g or ml.

TABLE 3.58 Frequency of Consumption of Fenugreek leaves

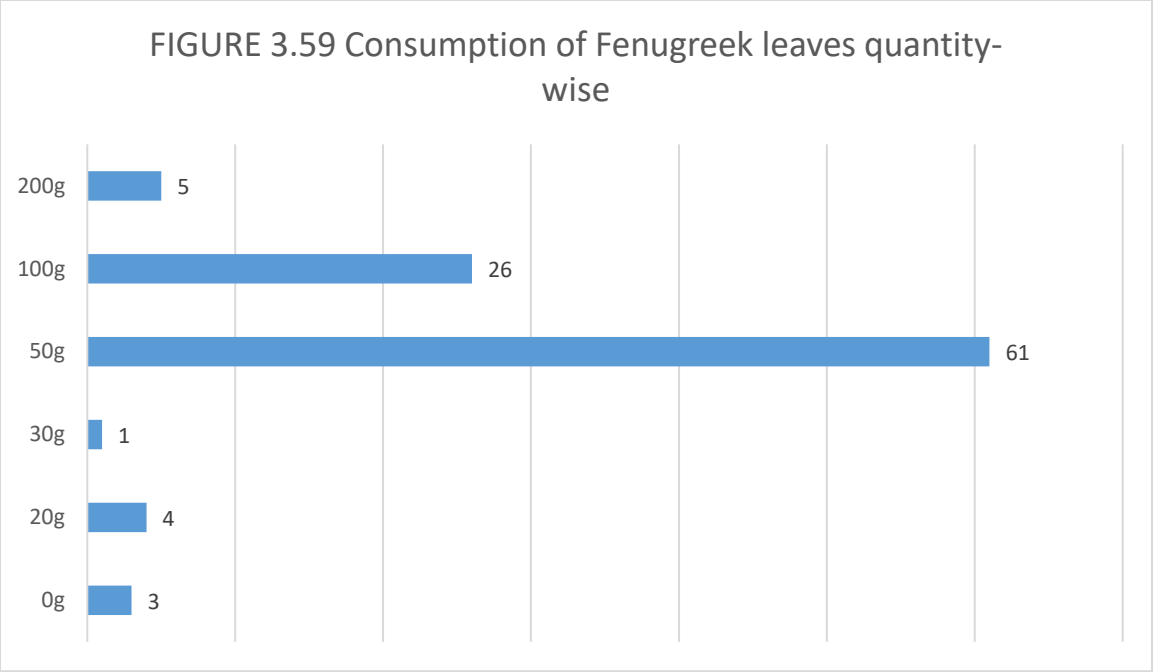
Valid	Frequency	Percent	Valid Percent	Cumulative Percent
Never	3	3.0	3.0	3.0
Rarely	2	2.0	2.0	5.0
Once a month	1	1.0	1.0	6.0
Twice a month	2	2.0	2.0	8.0
Forth month	1	1.0	1.0	9.0
Once a week	25	25.0	25.0	34.0
Twice a week	40	40.0	40.0	74.0
Thrice a week	9	9.0	9.0	83.0
Fourth a week	3	3.0	3.0	86.0
Daily	14	14.0	14.0	100.0
Total	100	100.0	100.0	



This table presents the frequency of consumption of fenugreek leaves among participants in a dietary survey. The majority of respondents (40%) reported consuming fenugreek leaves twice a week, while 25% reported consuming them once a week. Smaller percentages reported consuming them with less frequency, such as 14% who consumed them daily, 9% who consumed them thrice a week, and 3% who consumed them four times a week. Additionally, rare consumption was reported by 2% of respondents, while 1% reported consuming fenugreek leaves once a month, twice a month, or once every four months. Only 3% reported never consuming fenugreek leaves. Overall, the data suggests that fenugreek leaves are commonly consumed, with a significant portion of the sample consuming them at least weekly.

TABLE 3.59 Consumption of Fenugreek leaves quantity-wise

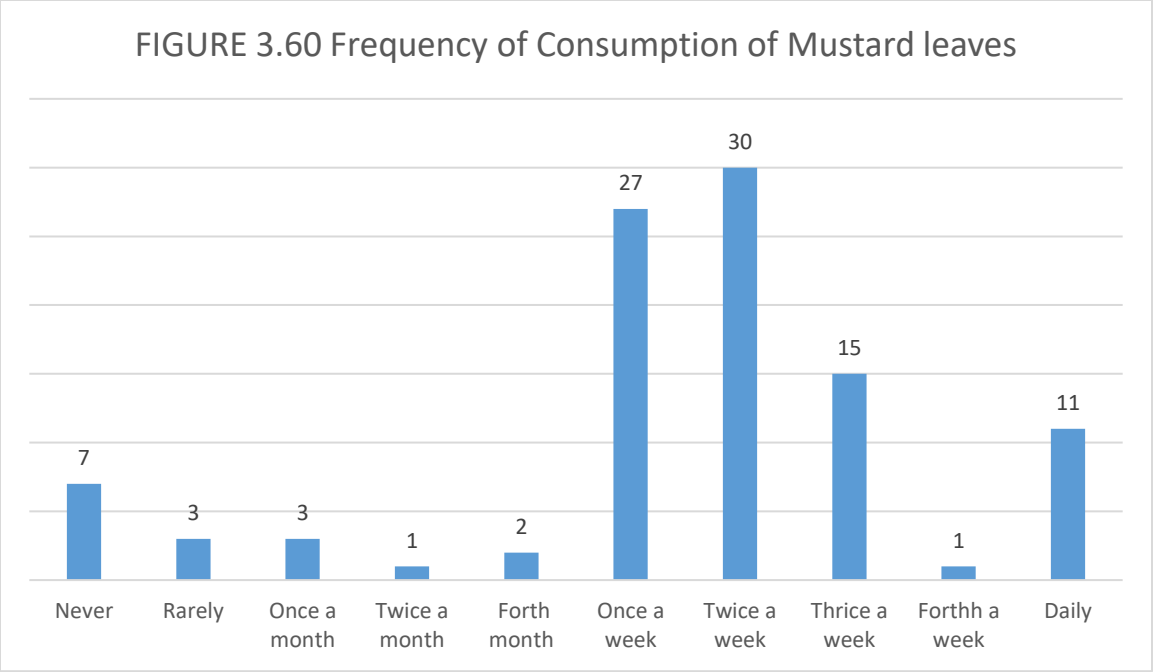
Valid	Frequency	Percent	Valid Percent	Cumulative Percent
0g	3	3.0	3.0	3.0
20g	4	4.0	4.0	3.0
30g	1	1.0	1.0	8.0
50g	61	61.0	61.0	69.0
100g	26	26.0	26.0	95.0
200g	5	5.0	5.0	100.0
Total	100	100.0	100.0	



This table presents the quantity of fenugreek leaves consumed, measured in g, as reported by participants in a dietary survey. The data indicates that 61% of respondents reported consuming 50 g of fenugreek leaves, while 26% reported consuming 100 g. Smaller percentages reported consuming different quantities, such as 4% consuming 20 g, another 4% consuming 200 g, and 1% consuming 30 g. Only 3% reported not consuming any fenugreek leaves. Overall, the data suggests a variety in the quantities consumed, with a significant portion of the sample consuming either 50 or 100 g.

TABLE 3.60 Frequency of Consumption of Mustard leaves

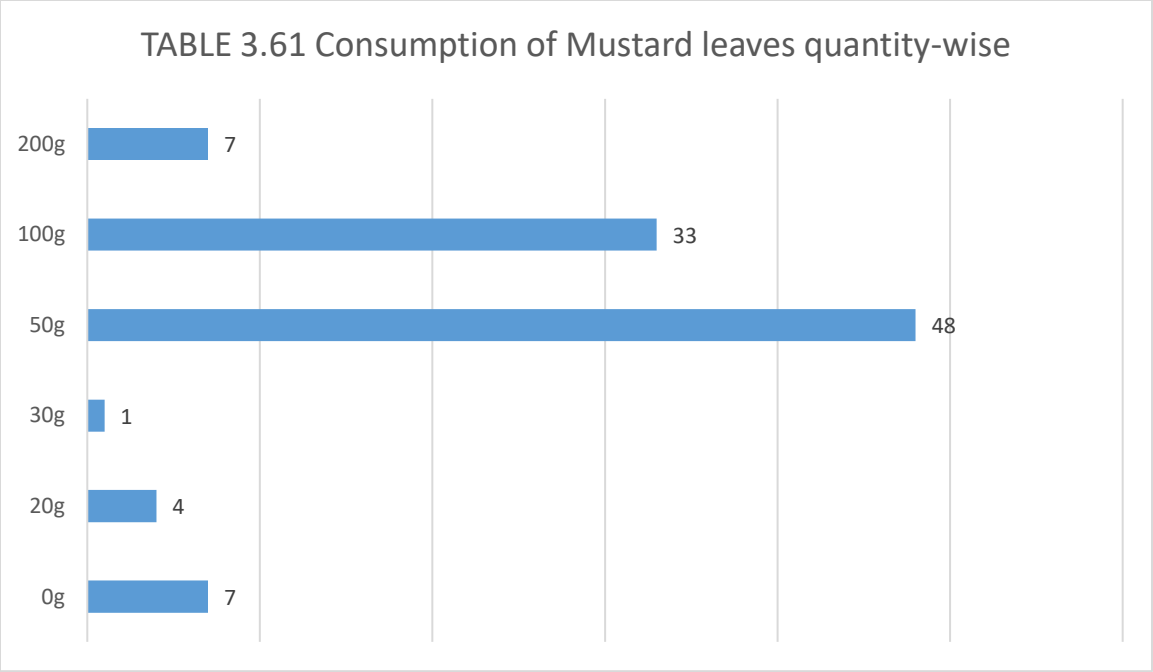
Valid	Frequency	Percent	Valid Percent	Cumulative Percent
Never	7	3.0	3.0	3.0
Rarely	3	3.0	3.0	10.0
Once a month	3	3.0	3.0	13.0
Twice a month	1	1.0	1.0	14.0
Forth month	2	2.0	2.0	16.0
Once a week	27	23.0	23.0	43.0
Twice a week	30	30.0	30.0	73.0
Thrice a week	15	15.0	15.0	88.0
Fourth a week	1	1.0	1.0	89.0
Daily	11	11.0	11.0	100.0
Total	100	100.0	100.0	



This table displays the frequency of consumption of mustard leaves among participants in a dietary survey. The majority of respondents (30%) reported consuming mustard leaves twice a week, while 27% reported consuming them once a week. Smaller percentages reported consuming them with less frequency, such as 15% who consumed them thrice a week, 11% who consumed them daily, and 2% who consumed them once a month. Additionally, rare consumption was reported by 3% of respondents, while 1% reported consuming mustard leaves twice a month, four times a month, or four times a week. Only 7% reported never consuming mustard leaves. Overall, the data suggests that mustard leaves are commonly consumed, with a significant portion of the sample consuming them at least weekly.

TABLE 3.61 Consumption of Mustard leaves quantity-wise

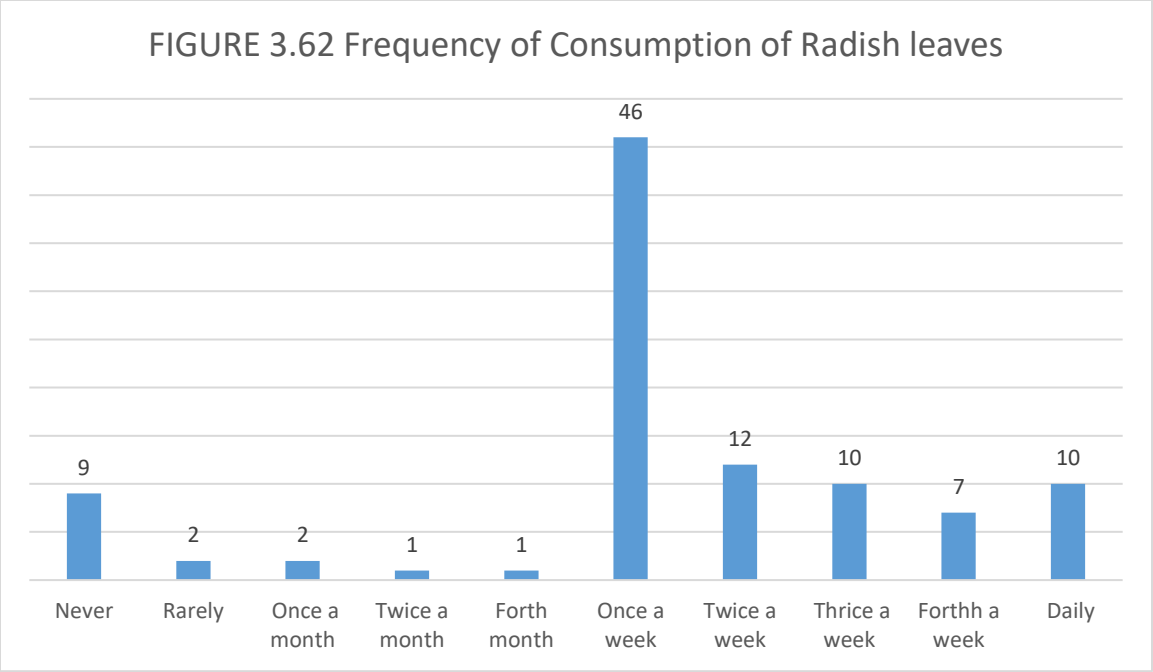
Valid	Frequency	Percent	Valid Percent	Cumulative Percent
0g	7	3.0	3.0	3.0
20g	4	4.0	4.0	11.0
30g	1	1.0	1.0	12.0
50g	48	48.0	48.0	60.0
100g	33	33.0	33.0	93.0
200g	7	3.0	3.0	100.0
Total	100	100.0	100.0	



This table presents the quantity of mustard leaves consumed, measured in g, as reported by participants in a dietary survey. The data indicates that 48% of respondents reported consuming 50 g of mustard leaves, while 33% reported consuming 100 g. Smaller percentages reported consuming different quantities, such as 7% consuming 20 g or 200 g. Additionally, 1% reported consuming 30 g. Only 7% reported not consuming any mustard leaves. Overall, the data suggests a variety in the quantities consumed, with 50 and 100 g being the most common amounts.

TABLE 3.62 Frequency of Consumption of Radish leaves

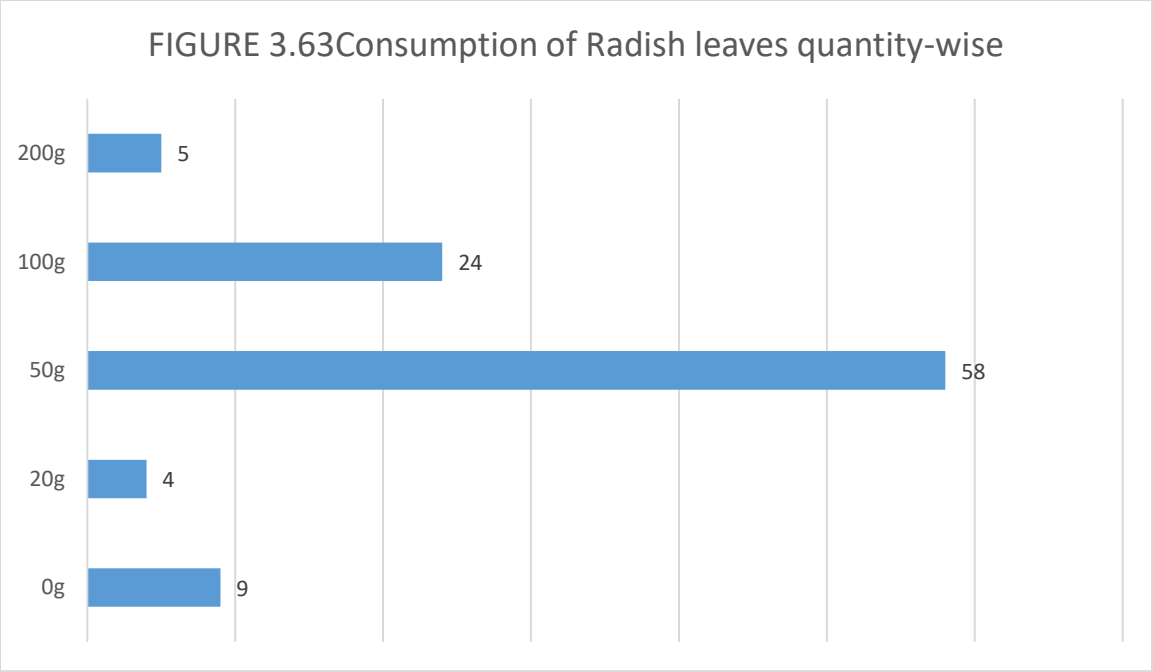
Valid	Frequency	Percent	Valid Percent	Cumulative Percent
Never	9	9.0	9.0	9.0
Rarely	2	2.0	2.0	11.0
Once a month	2	2.0	2.0	13.0
Twice a month	1	1.0	1.0	14.0
Forth month	1	1.0	1.0	15.0
Once a week	46	46.0	46.0	61.0
Twice a week	12	12.0	12.0	73.0
Thrice a week	10	10.0	10.0	83.0
Fourth a week	7	3.0	3.0	90.0
Daily	10	10.0	10.0	100.0
Total	100	100.0	100.0	



This table presents the frequency of consumption of radish leaves among participants in a dietary survey. The majority of respondents (46%) reported consuming radish leaves once a week, while 12% reported consuming them twice a week. Smaller percentages reported consuming them with less frequency, such as 10% who consumed them thrice a week and another 7% who consumed them four times a week. Additionally, 10% reported consuming them daily. Rare consumption was reported by 2% of respondents, while 1% reported consuming radish leaves once a month, twice a month, or once every four months. Only 9% reported never consuming radish leaves. Overall, the data suggests that radish leaves are commonly consumed, with a significant portion of the sample consuming them at least weekly.

TABLE 3.63 Consumption of Radish leaves quantity-wise

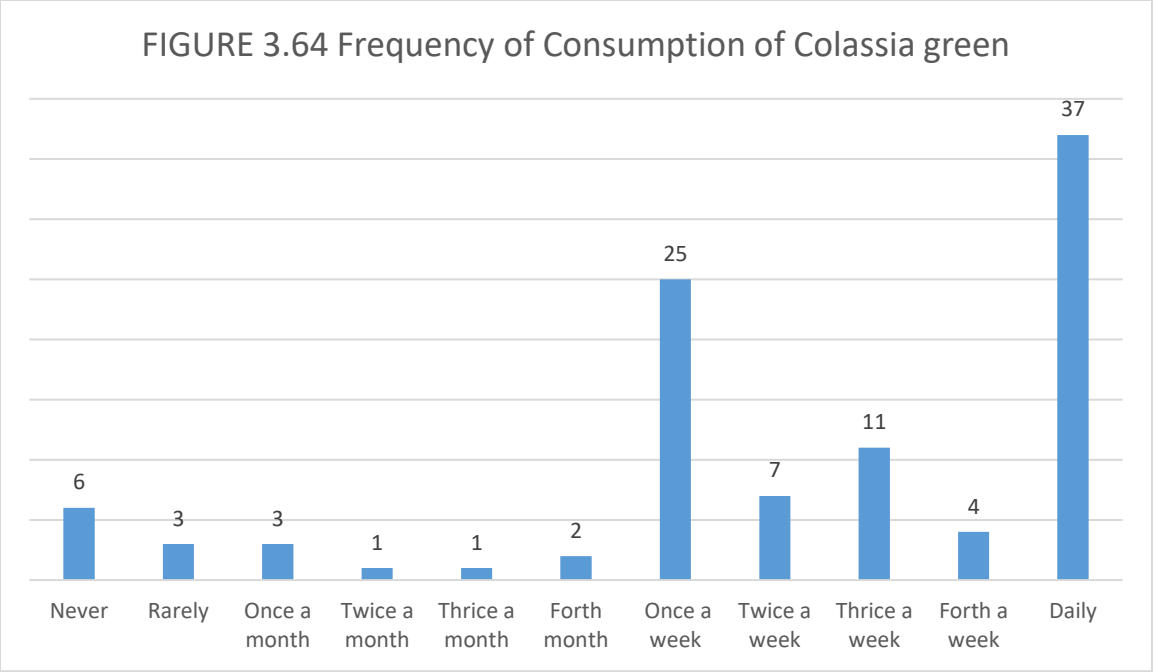
Valid	Frequency	Percent	Valid Percent	Cumulative Percent
0g	9	9.0	9.0	9.0
20g	4	4.0	4.0	13.0
50g	58	58.0	58.0	71.0
100g	24	24.0	24.0	95.0
200g	5	5.0	5.0	100.0
Total	100	100.0	100.0	



This table presents the quantity of radish leaves consumed, measured in g, as reported by participants in a dietary survey. The data indicates that 58% of respondents reported consuming 50 g of radish leaves, while 24% reported consuming 100 g. Smaller percentages reported consuming different quantities, such as 4% consuming 20 g or 200 g. Only 9% reported not consuming any radish leaves. Overall, the data suggests that 50 and 100 g are the most common quantities consumed.

TABLE 3.64 Frequency of Consumption of Colassia green

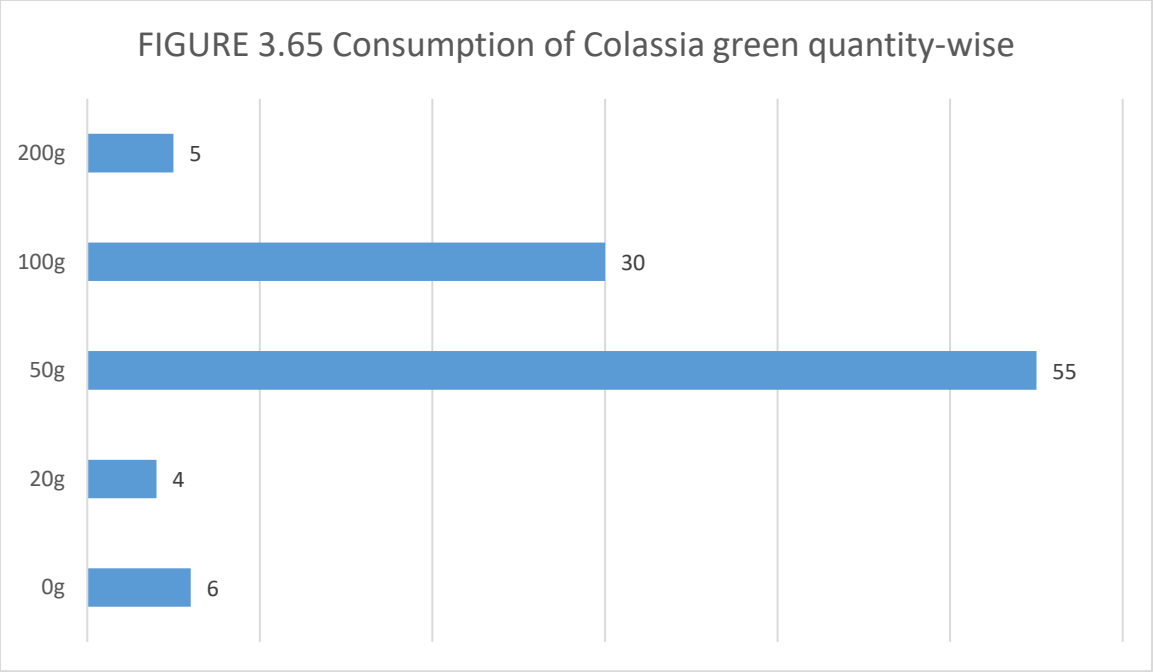
Valid	Frequency	Percent	Valid Percent	Cumulative Percent
Never	6	6.0	6.0	6.0
Rarely	3	3.0	3.0	9.0
Once a month	3	3.0	3.0	12.0
Twice a month	1	1.0	1.0	13.0
Thrice a month	1	1.0	1.0	14.0
Forth month	2	2.0	2.0	16.0
Once a week	25	25.0	25.0	41.0
Twice a week	7	3.0	3.0	48.0
Thrice a week	11	11.0	11.0	59.0
Forth a week	4	4.0	4.0	63.0
Daily	37	33.0	33.0	100.0
Total	100	100.0	100.0	



This table presents the frequency of consumption of colocasia leaves (green) among participants in a dietary survey. The majority of respondents (37%) reported consuming colocasia leaves daily, while 25% reported consuming them once a week. Smaller percentages reported consuming them with less frequency, such as 11% who consumed them thrice a week, 7% who consumed them twice a week, and 4% who consumed them four times a week. Additionally, rare consumption was reported by 3% of respondents, while 2% reported consuming colocasia leaves once a month, twice a month, or once every four months. Only 6% reported never consuming colocasia leaves. Overall, the data suggests that colocasia leaves are commonly consumed, with a significant portion of the sample consuming them daily.

TABLE 3.65 Consumption of Colassia green quantity-wise

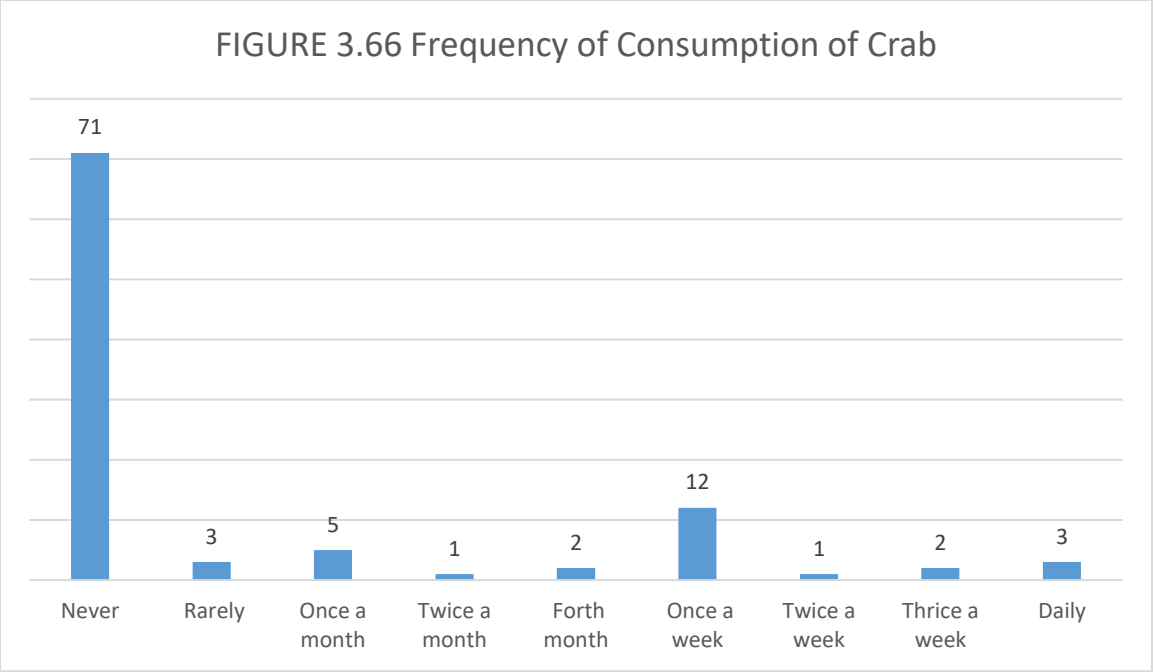
Valid	Frequency	Percent	Valid Percent	Cumulative Percent
0g	6	6.0	6.0	6.0
20g	4	4.0	4.0	10.0
50g	55	55.0	55.0	65.0
100g	30	30.0	30.0	95.0
200g	5	5.0	5.0	100.0
Total	100	100.0	100.0	



This table presents the quantity of colocasia leaves (green) consumed, measured in g, as reported by participants in a dietary survey. The data indicates that 55% of respondents reported consuming 50 g of colocasia leaves, while 30% reported consuming 100 g. Smaller percentages reported consuming different quantities, such as 6% consuming 20 g or 200 g. Overall, the data suggests that 50 and 100 g are the most common quantities consumed.

TABLE 3.66 Frequency of Consumption of Crab

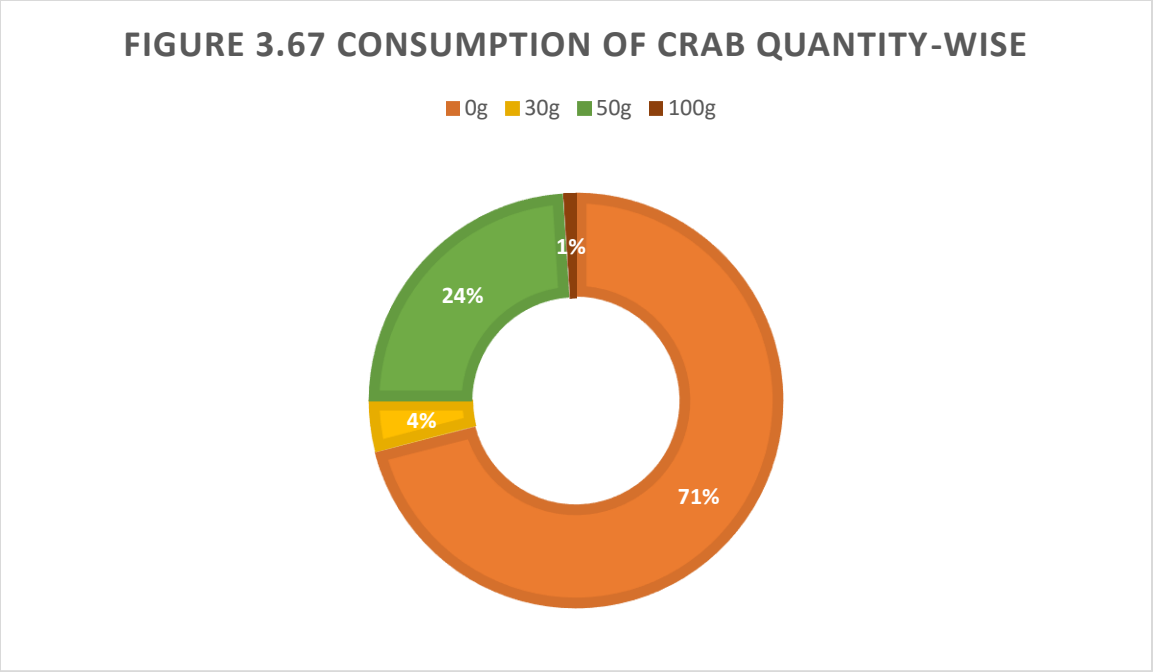
Valid	Frequency	Percent	Valid Percent	Cumulative Percent
Never	71	71.0	71.0	71.0
Rarely	3	3.0	3.0	74.0
Once a month	5	5.0	5.0	79.0
Twice a month	1	1.0	1.0	80.0
Forth month	2	2.0	2.0	82.0
Once a week	12	12.0	12.0	94.0
Twice a week	1	1.0	1.0	95.0
Thrice a week	2	2.0	2.0	93.0
Daily	3	3.0	3.0	100.0
Total	100	100.0	100.0	



This table presents the frequency of consumption of crab among participants in a dietary survey. The majority of respondents (71%) reported never consuming crab, while 12% reported consuming it once a week. Smaller percentages reported consuming it with less frequency, such as 5% who consumed it once a month and 2% who consumed it twice a month. Additionally, rare consumption was reported by 3% of respondents, while 1% reported consuming crab twice a week and another 2% reported consuming it thrice a week. Only 3% reported consuming crab daily. Overall, the data suggests that crab consumption is not very common among the surveyed population, with a majority reporting never consuming it.

TABLE 3.67 Consumption of Crab quantity-wise

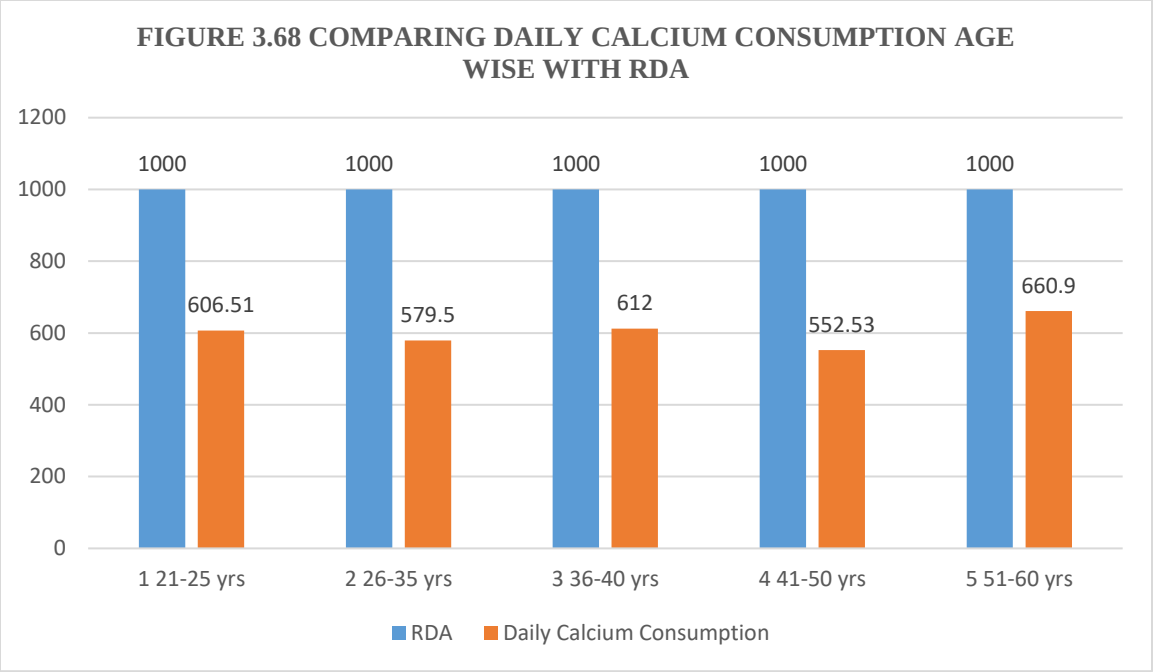
Valid	Frequency	Percent	Valid Percent	Cumulative Percent
0g	71	71.0	71.0	71.0
30g	4	4.0	4.0	75.0
50g	24	24.0	24.0	99.0
100g	1	1.0	1.0	100.0
Total	100	100.0	100.0	



This table presents the quantity of crab consumed, measured in g, as reported by participants in a dietary survey. The data indicates that 71% of respondents reported consuming crab, with no specific quantity mentioned. Among those who reported a specific quantity, 24% consumed 50 g, 4% consumed 30 g, and 1% consumed 100 g.

TABLE 3.68 COMPARING DAILY CALCIUM CONSUMPTION AGE WISE WITH RDA

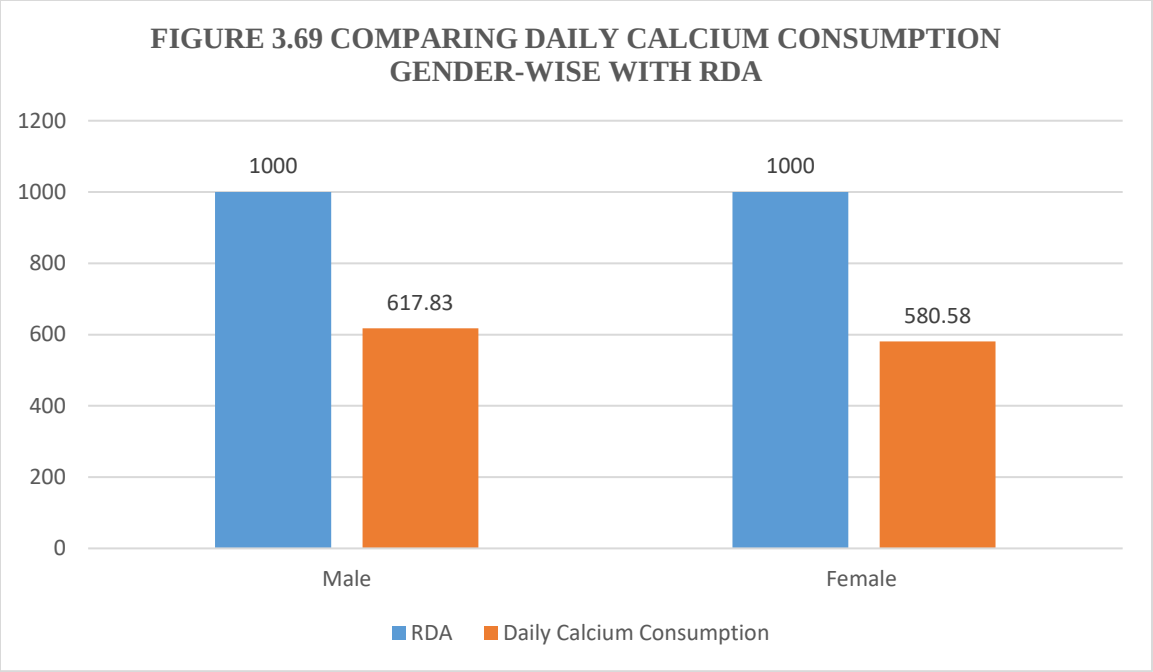
Age group	N	Mean	Std. Deviation	df	Mean Square	F	P value
21-25 yrs	47	606.51	173.167	4	22246.990	.765	.551
26-35 yrs	14	579.50	186.608				
36-40 yrs	10	612.00	122.366				
41-50 yrs	19	552.53	169.558				
51-60 yrs	10	660.90	176.192				
Total	100	598.46	169.751				



The table compares calcium intake relative to the Recommended Dietary Allowance (RDA) across different age groups. The age groups are 21-25 years (N=47, mean=606.51 mg, SD=173.167 mg), 26-35 years (N=14, mean=579.50 mg, SD=186.608 mg), 36-40 years (N=10, mean=612.00 mg, SD=122.366 mg), 41-50 years (N=19, mean=552.53 mg, SD=169.558 mg), and 51-60 years (N=10, mean=660.90 mg, SD=176.192 mg). The total sample size is 100 with an overall mean calcium intake of 598.46 mg and a standard deviation of 169.751 mg. The ANOVA results show a mean square of 22246.990, an F-value of 0.765, and a p-value of 0.551. The p-value is greater than the conventional alpha level of 0.05, indicating no statistically significant difference in calcium intake across the different age groups. Thus, the study concludes that age group does not significantly affect calcium intake among the participants.

TABLE 3.69 COMPARING DAILY CALCIUM CONSUMPTION GENDER-WISE WITH RDA

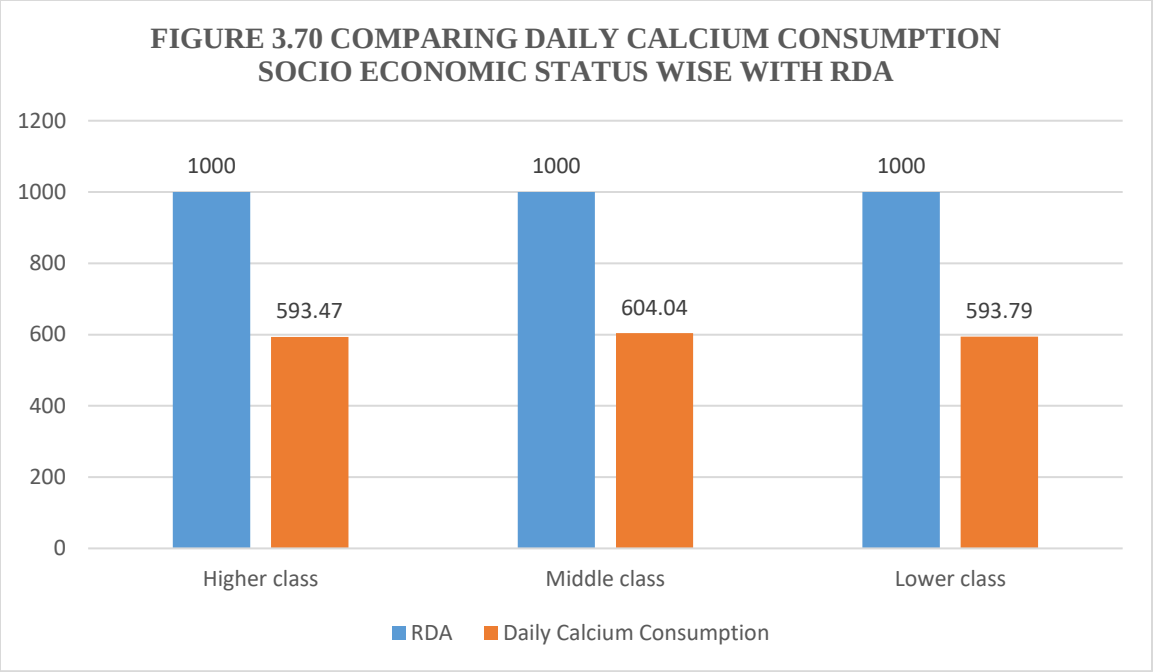
	Gender	N	Mean	Std. Deviation	t	df	P value
	Male	48	613.83	150.273	1.098	98	.275
GRAND TOTAL	Female	52	580.58	185.596	1.107	96.402	.271



The table presents a comparison of calcium intake relative to the Recommended Dietary Allowance (RDA) between males and females in a research study. The mean calcium intake for males (N=48) is 613.83 mg with a standard deviation of 150.273 mg, while for females (N=52), the mean intake is 580.58 mg with a standard deviation of 185.596 mg. The independent samples t-test results show a t-value of 1.098 with 98 degrees of freedom (df) for males, and a t-value of 1.107 with 96.402 df for females. The p-values for both groups are 0.275 and 0.271, respectively. These p-values are greater than the conventional alpha level of 0.05, indicating that there is no statistically significant difference in calcium intake between males and females in relation to the RDA. Thus, the study concludes that gender does not significantly affect calcium intake among the participants.

TABLE 3.70 COMPARING DAILY CALCIUM CONSUMPTION SOCIO ECONOMIC STATUS WISE WITH RDA

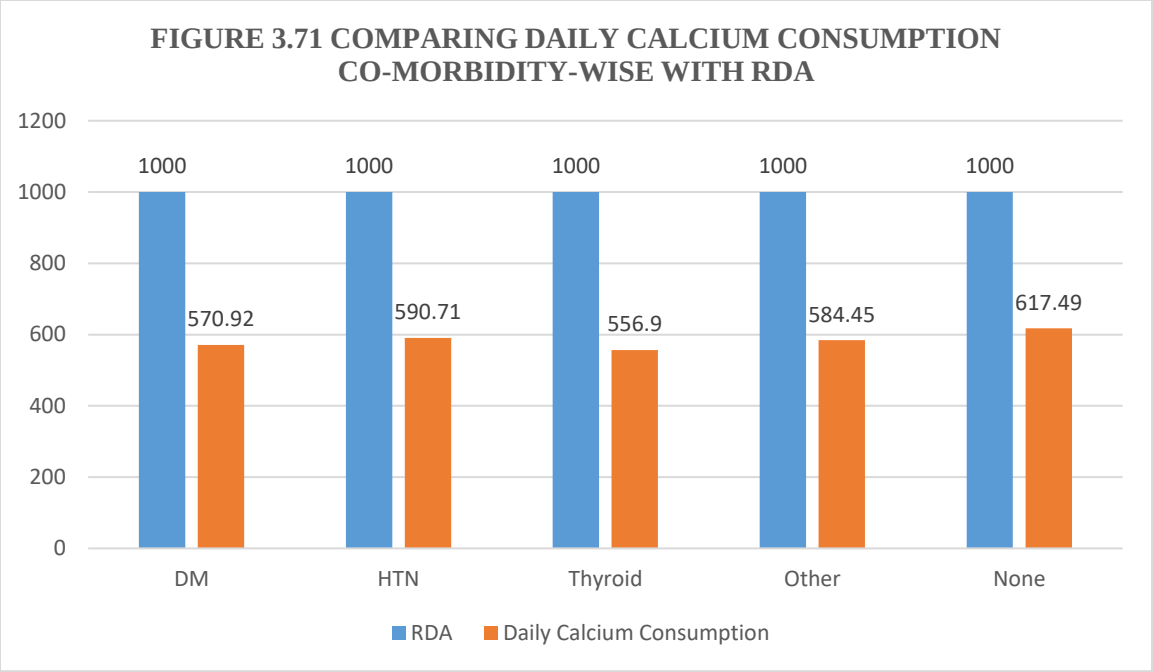
Socio economic Status	N	Mean	Std. Deviation	df	Mean Square	F	P value
Higher class	15	593.47	145.044	2	1328.417	.045	.956
Middle class	46	604.04	173.438				
Lower class	39	593.79	173.111				
Total	100	598.46	169.751				



The table compares calcium intake relative to the Recommended Dietary Allowance (RDA) among individuals from different socioeconomic statuses: Higher class, Middle class, and Lower class. The mean calcium intake for individuals from the Higher class (N=15) is 593.47 mg with a standard deviation of 145.044 mg, for Middle class (N=46) it is 604.04 mg with a standard deviation of 173.438 mg, and for Lower class (N=39) it is 593.79 mg with a standard deviation of 173.111 mg. The ANOVA results show a mean square of 1328.417, an F-value of 0.045, and a p-value of 0.956. Since the p-value is much greater than the conventional alpha level of 0.05, there is no statistically significant difference in calcium intake among individuals from different socioeconomic statuses. Thus, the study concludes that socioeconomic status does not significantly influence calcium intake among the participants.

TABLE 3.71 COMPARING DAILY CALCIUM CONSUMPTION CO-MORBIDITY-WISE WITH RDA

CO-MORBIDITY	N	Mean	Std. Deviation	df	Mean Square	F	P value
DM	12	570.92	159.973	4	12142.048	.411	.800
HTN	14	590.71	238.298				
Thyroid	10	556.90	168.916				
Other	11	584.45	162.278				
None	53	613.49	155.928				
Total	100	598.46	169.751				



The table compares calcium intake relative to the Recommended Dietary Allowance (RDA) among individuals with different medical conditions: Diabetes Mellitus (DM), Hypertension (HTN), Thyroid disorders, Other medical conditions, and those without any medical conditions. The mean calcium intake for individuals with DM (N=12) is 570.92 mg with a standard deviation of 159.973 mg, for HTN (N=14) it is 590.71 mg with a standard deviation of 238.298 mg, for Thyroid disorders (N=10) it is 556.90 mg with a standard deviation of 168.916 mg, for Other medical conditions (N=11) it is 584.45 mg with a standard deviation of 162.278 mg, and for those without any medical conditions (N=53) it is 613.49 mg with a standard deviation of 155.928 mg. The ANOVA results show a mean square of 12142.048, an F-value of 0.411, and a p-value of 0.800. Since the p-value is greater than the conventional alpha level of 0.05, there is no statistically significant difference in calcium intake among individuals with different medical conditions or those without any medical conditions. Thus, the study concludes that medical condition does not significantly influence calcium intake among the participants.

4. CONCLUSIONS

The study conducted at DY Patil University in Navi Mumbai provides valuable insights into the daily calcium intake habits of a diverse group of individuals. The findings reveal that, on average, participants consumed 598.46 mg of calcium per day, falling below the recommended daily allowance. This indicates that many individuals in the study are not meeting their calcium needs, irrespective of age, gender, socioeconomic status, or medical conditions. Despite efforts to include a balanced representation of genders and age groups in the sample, no significant differences in calcium intake were observed across these demographics. Similarly, factors such as occupation, urbanization, and food preferences did not appear to strongly influence calcium consumption patterns. This suggests that the issue of insufficient calcium intake affects various segments of the population and highlights the need for broad-based interventions.

The study also point to potential areas for health interventions. With a significant portion of participants being overweight and a notable prevalence of medical conditions like hypertension and diabetes, there is an opportunity to address these health concerns alongside efforts to improve dietary habits. Additionally, the low usage of calcium supplements among participants underscores the importance of promoting natural dietary sources of calcium.

While certain dietary habits were identified, such as the common consumption of black amaranth seeds, almonds, whole buffalo milk, and eggs, these alone were not sufficient to meet calcium requirements. This emphasizes the importance of consuming a varied diet that includes multiple calcium-rich foods to ensure adequate intake.

The study highlights the role of socioeconomic status in influencing dietary habits and, consequently, calcium intake. With a significant portion of participants identifying as lower or middle class, there is a need to explore strategies to make calcium-rich foods more accessible and affordable to these groups.

The research contributes valuable insights into the dietary calcium consumption patterns of the general population. By identifying demographic variations and areas for intervention, it aimed at promoting better dietary habits and improving calcium intake across all segments of society. Ultimately, prioritizing adequate calcium consumption can lead to better overall health outcomes for individuals across different life stages.

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